

Service Manual

PCM Digital Piano

SX-PX73/PX73M

(M), (MC), (XM), (EN), (EH), (EF), (EZ), (EW), (EA),
(EP), (EK), (XL), (XR), (XS), (XD), (X), (XT)



Photo: SX-PX73

AREAS

(M): U.S.A.	(EK): the United Kingdom
(MC): Canada	(XL): New Zealand
(XM): Mexico	(XR): Australia
(EN): Norway, Sweden, Denmark, Finland	(XS): Malaysia, Singapore, South Africa
(EH): Holland	(XD): Saudi Arabia, Kuwait
(EF): France, Italy, Belgium	(X): the Middle East, Indonesia, Hong Kong, the Philippines, Thailand
(EZ): Germany	
(EW): Switzerland	
(EA): Austria	
(EP): Spain, Portugal, Greece	(XT): Taiwan

■ Specifications

CABINET	SX-PX73: BLACK, SX-PX73M: WALNUT
KEYBOARD	88 KEYS (POLYPHONIC 32~16 NOTES)
SOUNDS	GRAND PIANO, UPRIGHT PIANO, ROCK PIANO, E PIANO 1, E PIANO 2, HARPSI, PIPE ORGAN
PEDAL	SOFT, SOSTENUTO, SUSTAIN
BRILLIANCE	MELLOW, NORMAL, BRIGHT (7 STEPS)
DIGITAL CELESTE	○
DIGITAL REVERB	ROOM, STAGE, HALL, CONCERT
TOUCH SENSITIVITY	LIGHT, NORMAL, HEAVY
TRANPOSE	G~C~F#
METRONOME	○ (TIME SIGNATURE: 2/4, 3/4, 4/4, 6/8)
SEQUENCER	TRACK (1, 2), STORAGE CAPACITY: APPROX. 4000 NOTES, RECORDING MODE: REAL TIME
DISPLAY	○
DEMO	○
MIDI	MULTI TIMBRE, LOCAL CONTROL, OMNI ON, PROGRAM CHANGE, TRANPOSE, PEDAL, EFFECT
MODE SET	PIANO TUNING, MIN RANGE
OTHERS	POWER SWITCH, MAIN VOLUME, TUNE, TEMPO, MIDI TERMINALS (IN, OUT, THRU), PEDAL IN, LINE OUT (R/R+L, L), AUX IN (R/R+L, L), PHONES×2, AC IN, INITIAL KEY
OUTPUT	20 W × 2
SPEAKERS	16 cm × 2, 12 cm × 2, 6.5 cm × 2
POWER REQUIREMENT	180 W, 110 W (NORTH AMERICA AND MEXICO) AC120/220/240V 50/60 Hz AC120V 60 Hz (NORTH AMERICA AND MEXICO) AC230V 50/60 Hz (EUROPE EXCEPT FOR UNITED KINGDOM)
DIMENSIONS (W×H×D)	137.9 cm × 100.5 cm × 49 cm (54-9/32" × 39-9/16" × 19-9/32")
NET WEIGHT	58 kg (127.9 lbs)
ACCESSORIES	AC CORD, STAND

* Specifications are subject to change without notice for further improvement.

Technics

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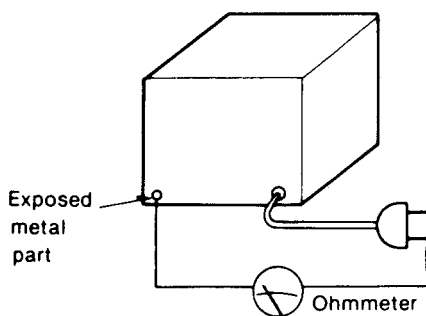
SAFETY PRECAUTION (This "safety precaution" is applied only in U.S.A.)

• Safety Precaution

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

• Insulation Resistance Test

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screw heads, connectors, control shafts, handle brackets, etc..
Measurements should range from 4 MΩ to infinity to all exposed parts.

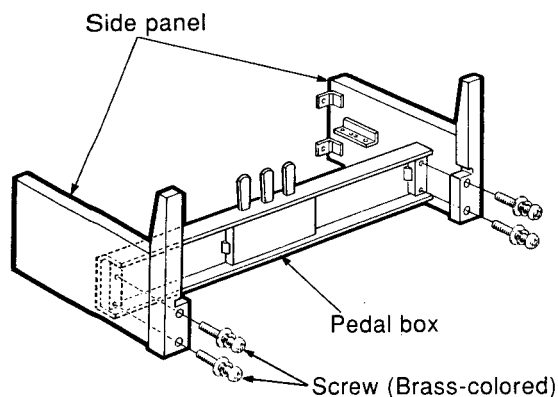


Resistance = 4 MΩ to ∞

HOW TO ASSEMBLE THE PIANO

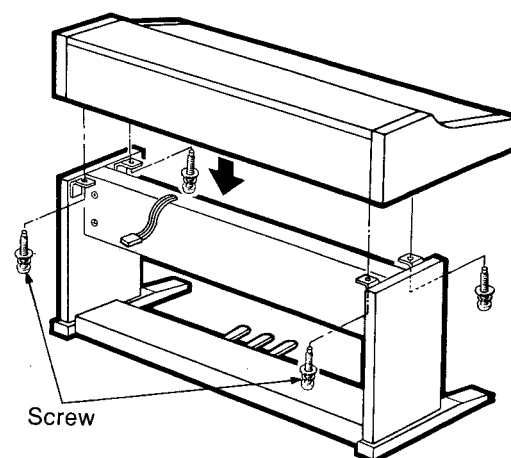
- To prevent the piano unit from falling off the stand, secure it firmly with the screws.

- 1** Assemble the side panels and the pedal box with the 4 brass-colored screws.



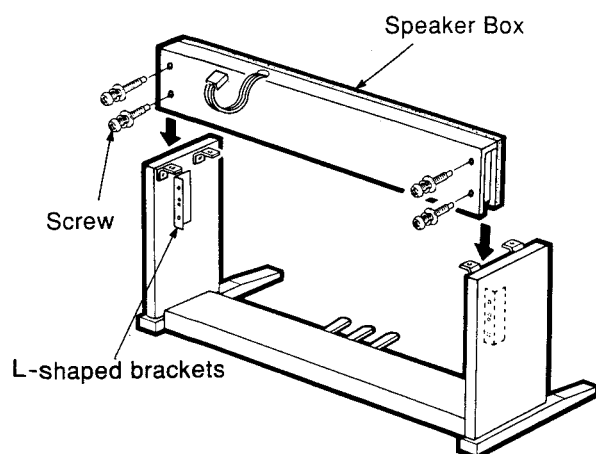
[Fig. 1]

- 3** Place the piano unit on the stand and secure it to the stand with the 4 screws. (Black screws for model SX-PX73, Brown screws for model SX-PX73M)



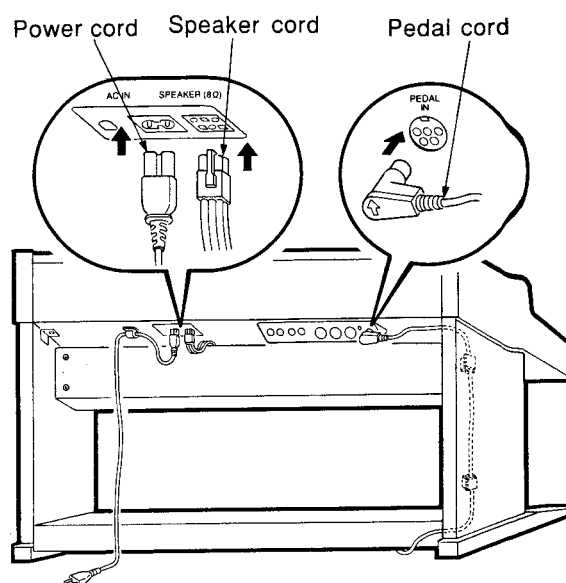
[Fig. 3]

- 2** Place the stand upright and mount the speaker box onto the L-shaped brackets with the 4 screws. (Black screws for model SX-PX73, Brown screws for model SX-PX73M)



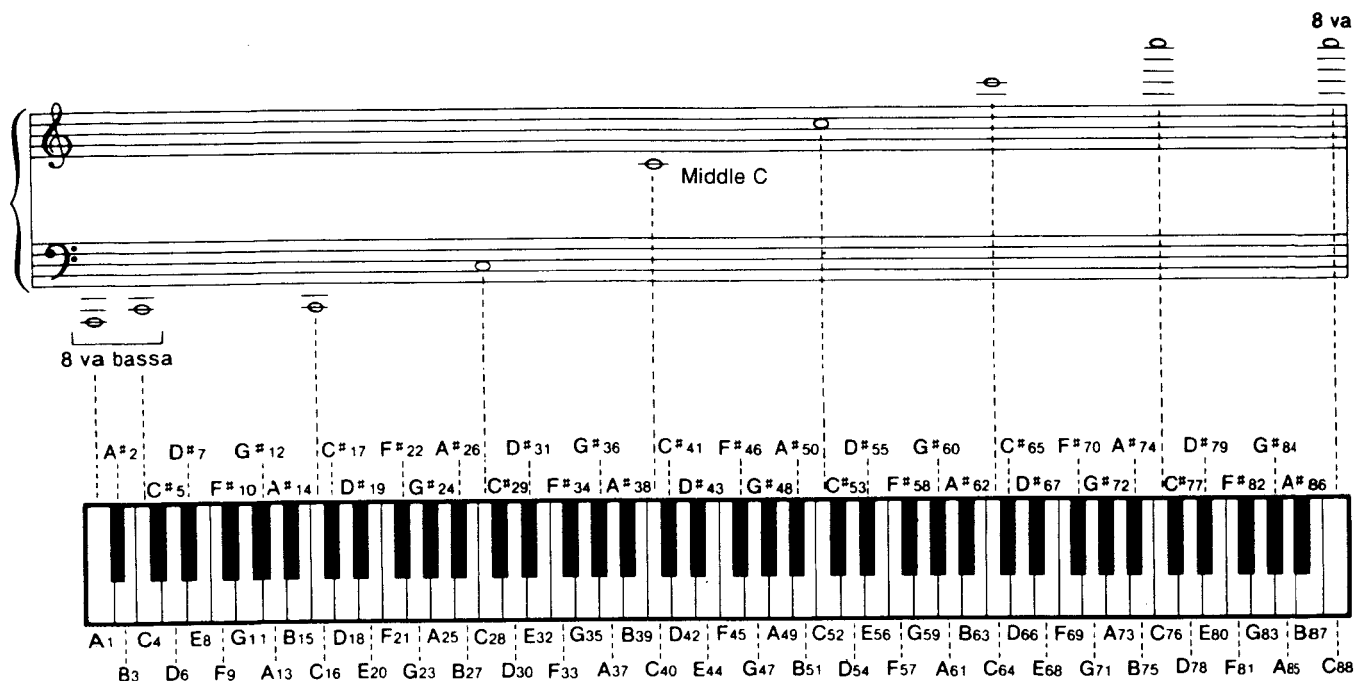
[Fig. 2]

- 4** Connect the pedal cord, speaker cord and power cord to their sockets located rear of the piano unit as shown below.



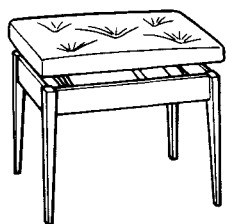
[Fig. 4]

KEYBOARD RANGES

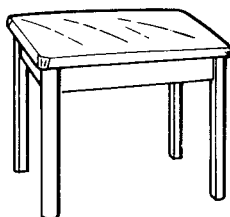


OPTIONS

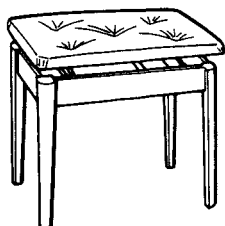
PRODUCTS FOR SX-PX73



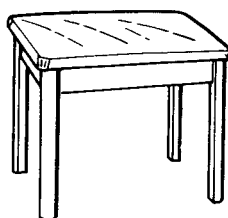
SZ-CP1 Bench

SZ-CP3
Bench

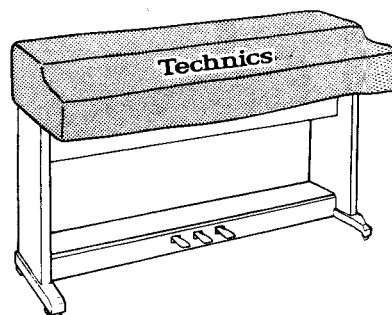
PRODUCTS FOR SX-PX73M



SZ-CP4M
Bench

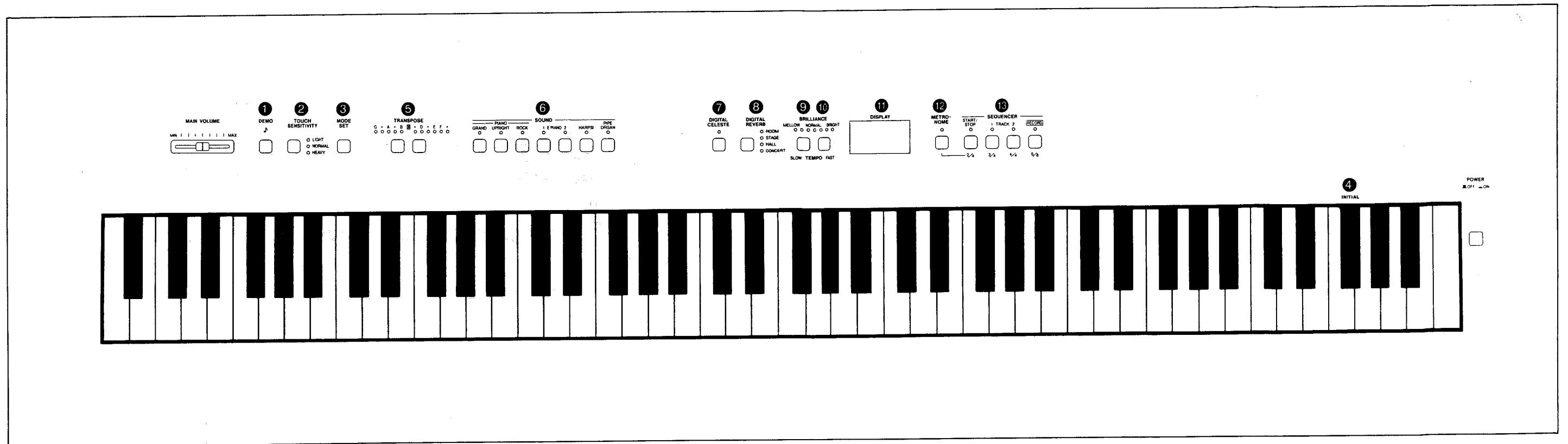


SZ-CP3M Bench



SZ-DC5
Dust Cover

ARRANGEMENT OF CONTROL PANEL



BASIC FUNCTIONS

1 DEMO

Automatic demonstration performances stored in the piano's memory introduce the various sounds available. Listen to all the demonstration tunes in order, or listen to the demo tune of a specific sound.

2 TOUCH SENSITIVITY

Choose **LIGHT**, **NORMAL** or **HEAVY** keyboard touch (Touch Response) to match your type of playing.

3 MODE SET, 4 INITIAL KEY

Used when selecting functions to set or adjust, including type of piano tuning, minimum range (volume), initialization, plus all settable MIDI functions. Also used when erasing **SEQUENCER** tracks.

- If the **INITIAL KEY** is pressed while the **MODE SET** button is depressed, the settings of the buttons, etc. will return to the initialized settings made by the manufacturer.

5 TRANSPOSE

C is the standard setting, but you can raise or lower the key of the entire instrument within a one-octave range with these two buttons. The buttons are also used for adjusting the volume balance of mixed sounds.

6 SOUND

Select from 7 different sounds for the piano. You can mix sounds by selecting two simultaneously. All sounds feature Touch Response.

7 DIGITAL CELESTE

Apply a celeste effect to give the sound greater depth. The setting is memorized independently for each sound.

8 DIGITAL REVERB

Add a reverb effect to the sound. Choose one of four different echo types. The setting is memorized independently for each sound.

9 BRILLIANCE

Select the brightness of the sound from seven settings. The setting is memorized independently for each sound.

10 TEMPO

Use to adjust the tempo and volume of the metronome and the playback tempo of the **SEQUENCER**.

11 Display

Various information is shown on the display, including **SEQUENCER** information (remaining memory capacity, error indication) and MIDI information (selected MIDI CHANNEL, PROGRAM CHANGE number).

12 METRONOME

You can play in time with a metronome sound. The metronome volume and speed are adjustable, and you can accent the metronome sound to match the time signature of the music.

13 SEQUENCER

Record your performance and have it automatically played back on the two-track sequencer. The memory capacity is about 4000 notes.

14 Sustain pedal

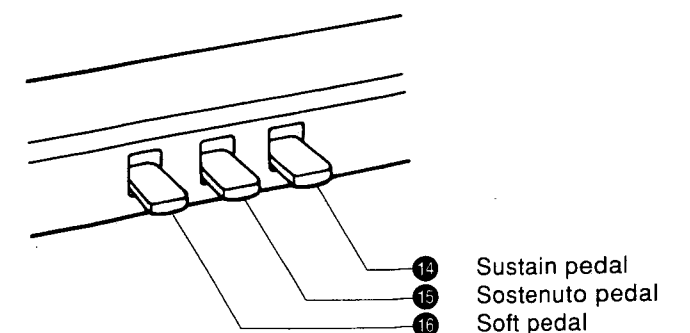
The sound is sustained when a key is released while this pedal is depressed. The length of the sustain is controlled by the degree to which the pedal is depressed (four stages). For **PIANO** sounds, the tones of the 17 rightmost keys are automatically sustained.

15 Sostenuto pedal

Sustain is added only to the notes played while the pedal is depressed.

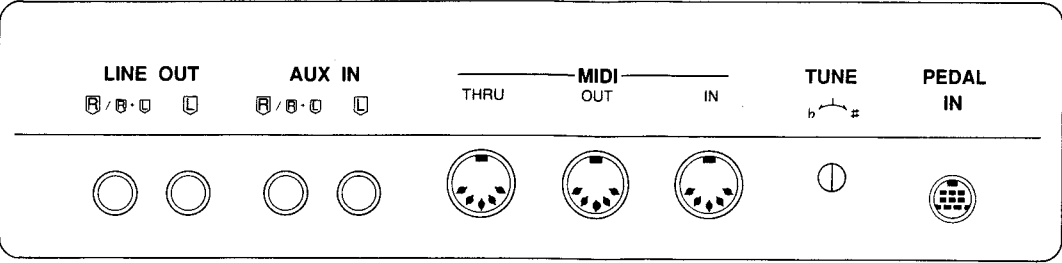
16 Soft pedal

Press the pedal for softer, muted sound.



TERMINALS

(On the back of piano)



LINE OUT (output level 1.5 Vrms, 600 Ω)
By plugging into an external high-power amplifier, the sound can be reproduced at a high volume. Or connect a tape recorder and use them as recording terminals. To output monaural sound, connect the external equipment to the **R/R+L** terminal. (Do not connect the **L** terminal.)

AUX IN (input level 0.5 Vrms, 33 kΩ)
Other instruments such as a rhythm machine or sound module can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect the other instrument to the **R/R+L** terminal. (Do not connect the **L** terminal.)

TUNE
During an ensemble performance with other instruments, fine adjustments of pitch can be made using this knob. The center position is standard pitch (A=440 Hz). The pitch is adjustable in a range of ±50 cents.

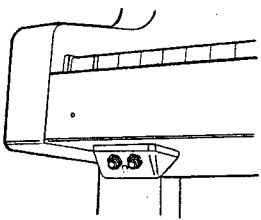
PEDAL IN
Connect the cord from the included stand to this terminal.

MIDI (Musical Instrument Digital Interface)
MIDI is the standard specification that enables connection to equipment such as synthesizers and personal computers. Data transmission and reception are possible between the Technics Digital Ensemble and instruments provided with MIDI terminals.

IN: The terminal that receives data from external equipment.
OUT: The terminal that transmits data from the piano to external equipment.
THRU: The terminal that transfers data from the **IN** terminal directly to other equipment.

• Use a 5-pin DIN cord (less than 15m long) for these connections.

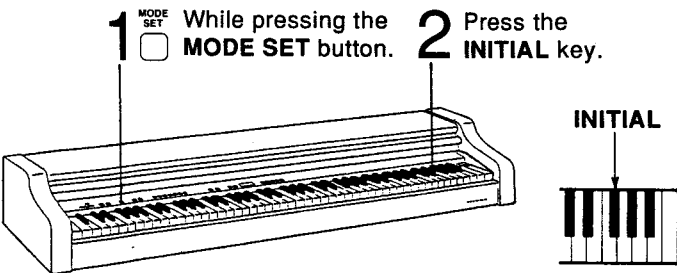
PHONES (Ω) ×2
For silent practice headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.



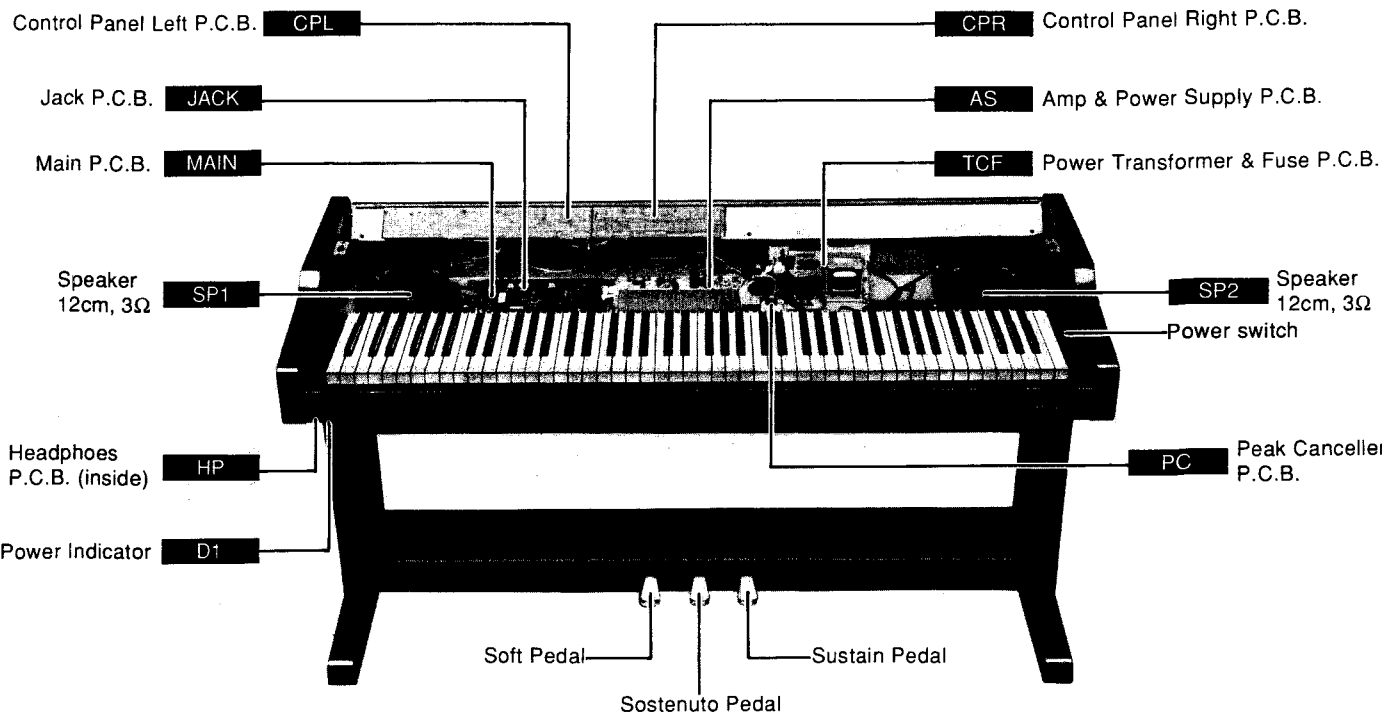
INITIAL SETTING

The initial setting function is used to return to the original factory settings, and to reset the customer settings and misoperations. The selected sound and various functions, MIDI settings and **SEQUENCER** contents are initialized with this operation.

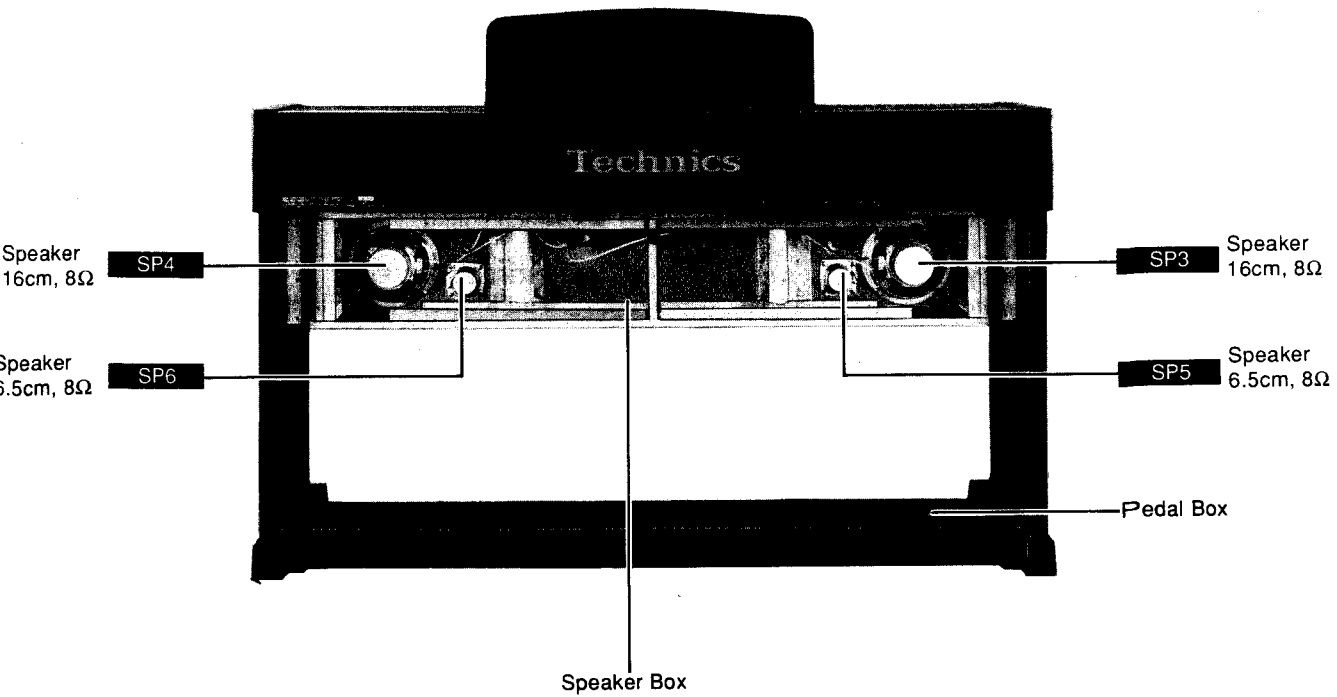
- **INITIAL SETTING**
Press the **INITIAL** key while the **MODE SET** button is pressed. Or turn on the **POWER** switch while pressing the **INITIAL** key.



PARTS LOCATION



[Photo-1]



[Photo-2]

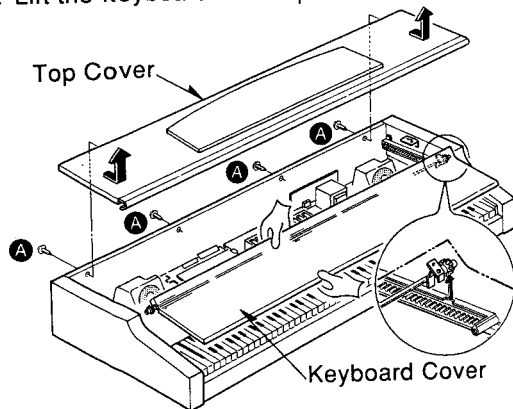
DISASSEMBLY INSTRUCTIONS

1 Removing the top cover (Fig. 5)

1. Remove the top cover holding screws (● 4 pcs.).
2. Slide the top cover forward and lift up.
(As shown by the arrow.)

2 Removing the keyboard cover

1. Remove the top cover (see step 1).
2. Close the keyboard cover completely so that the gears at the rear of the keyboard cover become free from the guide rails.
3. Lift the keyboard cover up.



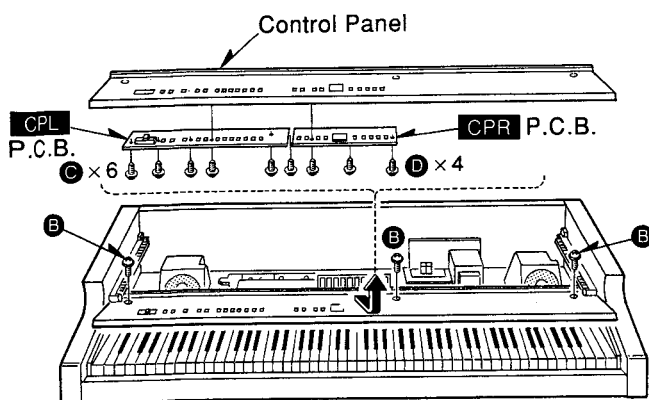
[Fig. 5]

3 Removing the control panel (Fig. 6)

1. Remove the keyboard cover (see step 2).
2. Remove the control panel holding screws (● 3 pcs.).
3. Remove the control panel as shown in Figure 6.

4 Removing the CPL and CPR P.C.B.s

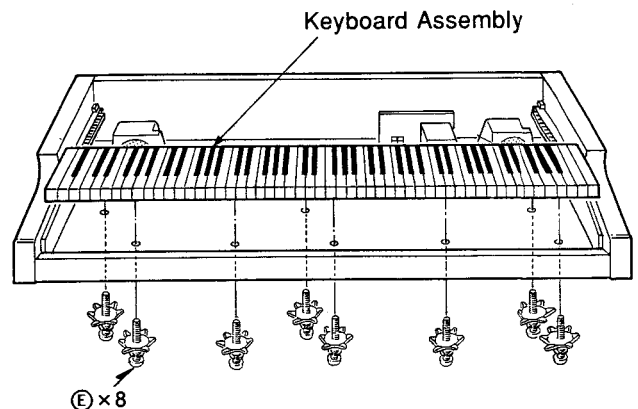
1. Remove the control panel (see step 3).
2. Remove the CPL P.C.B. mounting screws (● 6 pcs.).
3. Remove the CPR P.C.B. mounting screws (● 4 pcs.).



[Fig. 6]

5 Removing the keyboard assembly

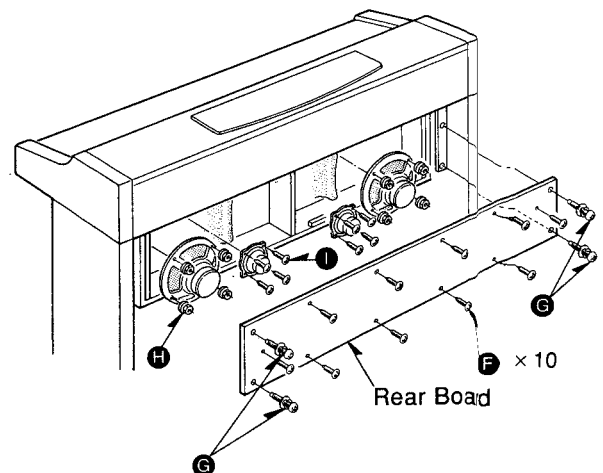
1. Remove the control panel (see step 3).
2. Remove the keyboard ass'y holding screws located on the bottom of the cabinet (● 8 pcs.).



[Fig. 7]

6 Removing the speakers

1. Remove the rear board mounting screws (● 10 pcs. and ● 4 pcs.).
• Be careful that the speaker box does not fall off, since it comes free of the L-shaped bracket of the stand.
2. Remove the 16cm speakers mounting nuts (● 4 pcs. each).
3. Remove the 6.5cm speakers mounting screws (● 4 pcs. each).



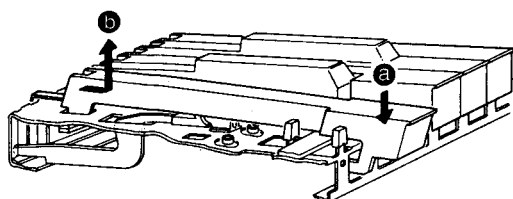
[Fig. 8]

7 Key(s) Disassembly

1. Remove the keyboard assembly (see step 5).
2. To release the key claw.
 - a Press the front of the key downward slightly.
 - b Press the rear of the key forward gently.
3. To remove the key, lift as shown in Figure 9.

NOTE:

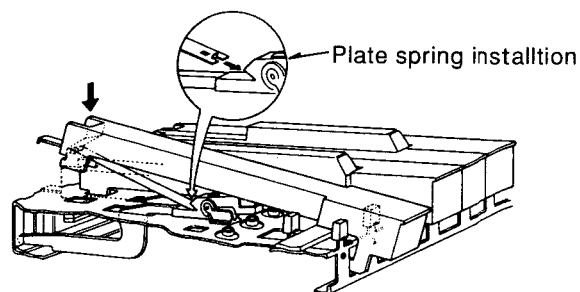
- The key claw is easily broken. Do not apply undue force. Should a key claw break, it can still be used; however, a replacement is recommended.
- If a black key is to be replaced it is necessary to remove both adjacent white keys.



[Fig. 9]

Assembly

1. Insert the front part of the key into the chassis.
2. Insert the plate spring into the hammer notch as shown in Figure 10.
3. While slowly lowering the key into the chassis, insert the plate spring into the notch at the rear of the key.
4. Carefully insert the key into the opening in the chassis and slide the key towards the rear to lock it in place.



[Fig. 10]

8 Removing the printed circuit boards.

- Remove the top cover (see step 1).

MAIN P.C.B.

1. Disconnect the 4 connectors.
2. Remove the MAIN P.C.B. mounting screws (J 2 pcs.).
3. Release the claws of the 2 P.C.B. holders.

JACK P.C.B.

1. Disconnect the 2 connectors.
2. Remove the JACK P.C.B. mounting screws (K 3 pcs.).

TCF P.C.B.

1. Remove the power transformer mounting screws (M 4 pcs.).
2. Release the claws of the AC IN connector bracket.

PC P.C.B.

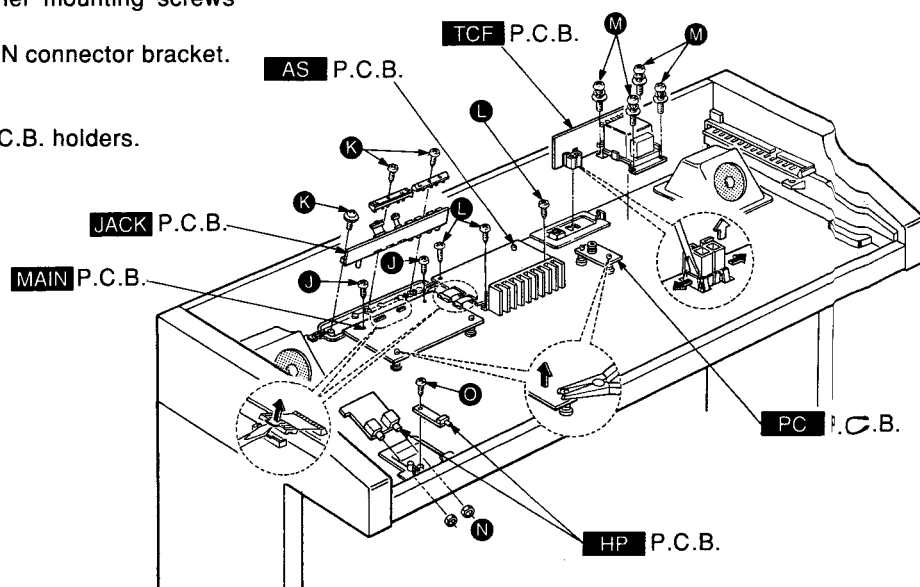
1. Release the claws of the 2 P.C.B. holders.

AS P.C.B.

1. Disconnect the 2 connectors.
2. Remove the AS P.C.B. mounting screws (L 3 pcs.).
3. Release the claws of the P.C.B. holder.

HP P.C.B.

1. Remove the keyboard assembly (see step 5).
2. Remove the headphone jack mounting nuts (N 2 pcs.).
3. Remove the HP P.C.B. mounting screw (O 1 pc.).



[Fig. 11]

MEASUREMENTS AND ADJUSTMENTS

■ Measuring Equipment

- Oscilloscope 20 MHz, 1:1 probe

ADJUSTMENT	MEASURING CONDITIONS	EQUIPMENT	ADJUSTMENT P.C.B.	ADJ. POINT	CONNECT POINT(S)	READING
D/A Converter offset	any position	Oscilloscope	MAIN P.C.B.	VR1	IC18 Pin ⑦	0V ±5 mV
1. Set the oscilloscope voltage division to 5 mV/cm (Use the 1:1 oscilloscope probe) and connect the oscilloscope probe to IC18 Pin ⑦ on MAIN P.C.B. 2. Turn VR1 to adjust the voltage to zero.						
MEMO						

SYMPTOMS WHICH APPEAR TO BE SIGNS OF TROUBLE

Phenomenon	Remedy
No sound is produced when the keyboard is played.	• No sound is produced if the MAIN VOLUME is set to MIN. Use the sliding control to set the volume to an appropriate level. • If the MIDI LOCAL CONTROL is set to off, set it to on.
Nothing is shown on the display.	• The metronome, SEQUENCER tempo, etc. are indicated on the display. During normal performance, however, the display is off.

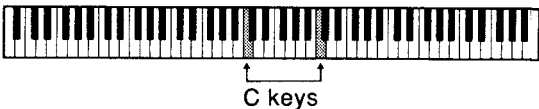
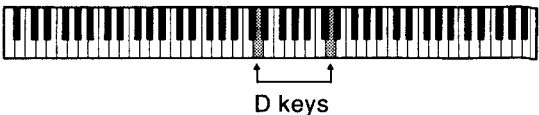
■ About the back-up memory

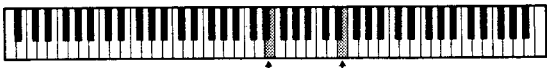
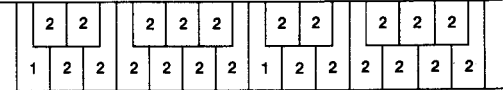
The selected sound and various functions, MIDI settings and **SEQUENCER** contents remain in the memory for about one week after the **POWER** is turned off. If you wish to return all memories and

settings to their initialized status, while pressing the **MODE SET** button, press the **INITIAL** key on the keyboard. Or you can turn on the **POWER** while pressing the **INITIAL** key.

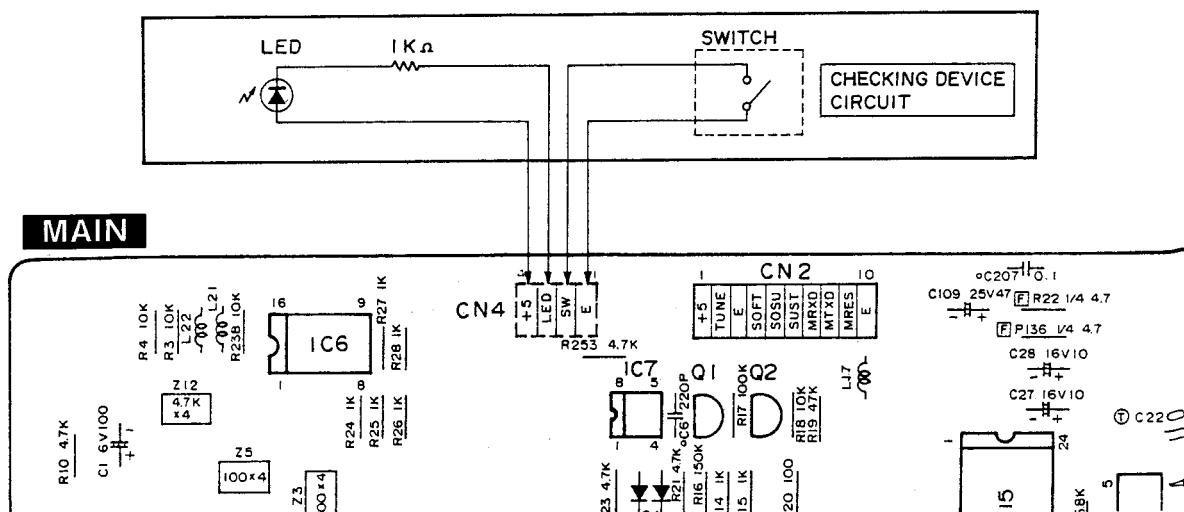
ABOUT THE SELF-DIAGNOSTIC FUNCTION

This model has some self-diagnostic capabilities. When set to the self-diagnostic mode, operation of various components can be verified by following the procedures in the chart below.

No.	PCB	Component(s) Under Test	Procedure
1	MAIN	RAM (IC4), ROM (IC3) check	1. Connect the CHECKING DEVICE (refer to page I-12) to CN4 on the MAIN PCB, and turn on the CHECKING DEVICE switch. 2. Turn on the power switch.
		When the power switch is turned on, the LED of the CHECKING DEVICE flashes on and off. The first 4 flashes are for the RAM check, and the latter 4 flashes are for the ROM check. The flash number corresponds to the RAM number and ROM number; since one RAM and one ROM are used in this model, flash 1 of the first 4 flashes corresponds to the RAM (IC4) check, and flash 1 of the second 4 flashes corresponds to the ROM (IC3) check. If the part is defective, the flash time for that part becomes longer. Examples 1. RAM OK, ROM OK → RAM 1234 ●●●● ROM 1234 ●●●● 2. RAM OK, ROM defective → RAM 1234 ●●●● ROM 1234 —●●● 3. RAM defective, ROM OK → RAM 1234 —●●● ROM 1234 ●●●● Note: — indicates long flash time. ↑ RAM (IC4) ↑ ROM (IC3)	
2	MAIN	Gate array (IC2) check	While pressing two C keys simultaneously, turn on the power switch.  Monitor pins 46~48 (DL6~DL4) of IC2 on an oscilloscope, and check whether incremental data (see figure) is output. 
		1. IC1 OK → ●●●● 2. IC1 defective → —●●● ↑ Gate Array (IC1)	
3	CPL	Gate array (IC1) check	1. Connect the CHECKING DEVICE to CN4 on the MAIN PCB. (The Checking Device switch should be off.) 2. While pressing two D keys simultaneously, turn on the power switch.  When the power switch is turned on, the LED of the CHECKING DEVICE flashes. The LED flashes 4 times, the first flash corresponding to the IC1 check. If IC1 is defective, the first flash will be longer.
		1. IC1 OK → ●●●● 2. IC1 defective → —●●● ↑ Gate Array (IC1)	

No.	PCB	Diagnosis item	Procedure
4	MAIN	Wave ROM (IC11, IC13) check	1. While pressing two E keys simultaneously, turn on the power switch. 2. Select the GRAND PIANO sound.  E keys
		When set to the self-diagnostic mode, the Wave ROM outputs a sine wave. The Wave ROMs correspond to the keyboard keys as shown in the diagram to the right. When a key is pressed, the corresponding sine wave sound is produced. If no sound is produced, or if the sound is distorted, the Wave ROM corresponding to that key is defective.	• The key number indicates the Wave ROM number (ROM 1: IC11, ROM 2: IC13). 
5	CPL, CPR	Control panel LED check	While pressing two F keys simultaneously, turn on the power switch.  F keys
		Press the buttons on the control panel and confirm that the corresponding LEDs light.	
6	CPR	7-segment LED (display) check	While pressing two G keys simultaneously, turn on the power switch.  G keys
		When set to the self-diagnostic mode, the test pattern is shown on the display. Monitor the display to confirm that the characters appear correctly. Examples: 000 → 111 → 222 ----- 888 → 999	
7	MKB	Keyboard ROM (IC2) check	While pressing two B keys simultaneously, turn on the power switch.  B keys
		If the keyboard ROM (IC2) is OK, one confirming beep will sound. If it is defective, several consecutive error beeps will sound.	

■ Connection between serving CHECKING DEVICE and MAIN PCB



MIDI IMPLEMENTATION CHART

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1~16 1~16	1~16 1~16	memorized
Mode	Default Messages Altered	3 × —	1, 3 × —	memorized
Note Number	True voice	*21~108 —	0~127 *0~127	
Velocity	Note ON Note OFF	○ × (9nH: V=0)	○ ×	
After Touch	Key's Ch's	× ×	× ×	
Pitch Bender		×	×	
Control Change	7	×	**○	volume
	64	○×	○×	sustain pedal
	66	○×	○×	sostenuto pedal
	67	○×	○×	soft pedal
	93	○×	○×	chorus (digital celeste)
Prog Change	True #	○×	○×	
System Exclusive		×	×	
System Common	Song Pos Song Sel Tune	× × ×	× × ×	
System Real Time	Clock Commands	× ×	× ×	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	× × ○ ×	× ○ ○ ×	
Notes		○× Whether or not the data for each of these items is transmitted or received can be set. * Changes depending on the TRANPOSE setting. ** Effective only in the MULTI TIMBRE mode.		

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

○ : Yes
× : No

- This product adheres to MIDI specifications as published by the Japan MIDI Association.

PRECAUTIONS BEFORE SERVICING

■ Precautions for measuring of the output waveforms.

- 1. The waveform was measured with a "National Digital Storage Oscilloscope VP-5730A". Therefore the waveforms of musical tone signals shown may differ somewhat due to the difference in the timing of triggering.
- 2. Since the 1/10 test probe is used, the indicated voltage value on the bottom part of each waveform photo is 1/10 of the actual value (e.g. 0.2V/cm should be 2.0V/cm).
- 3. To measure the waveforms, first set this unit to the self-diagnostic mode (refer to page I-12, No. 4). The WAVE ROM output will then be output as a sine wave to facilitate the servicing check.

■ Important safety notice:

Components identified by a ⚠ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

■ Symbolic Marks

The symbolic marks for resistors and capacitors which used in this circuits are classified as following TABLE-1 and TABLE-2.

1. RESISTORS

- Resistors without symbolic mark are FIXED CARBON FILM RESISTORS (ERD-type).
- All resistors are 1/4WATT, ±5% TOLERANCE unless otherwise designated in the schematic diagrams.

(TABLE-1)

SYMBOL	SPECIFICATION	SYMBOL	SPECIFICATION
Ⓡ	Fixed Carbon Film Resistors "FLAME-PROOF" (ERD—F—type)	Ⓡ	Fixed Metal Film Resistors "FLAME-PROOF" (ERX—type)
Ⓡ	Fixed Wire Wound Resistors "FLAME-PROOF" (ERF—type)	Ⓡ	Fuse Type Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERQ—type)
Ⓡ	Fixed Metal Oxide Film Resistors "FLAME-PROOF" (ERG—type)	Ⓡ	Fuse Type Fixed Carbon Film Resistors "FLAME-PROOF" (ERD2FC—type)
Ⓢ	Fixed Metal Film Resistors (Precision and High Stability) (ERO—type)		

2. CAPACITORS

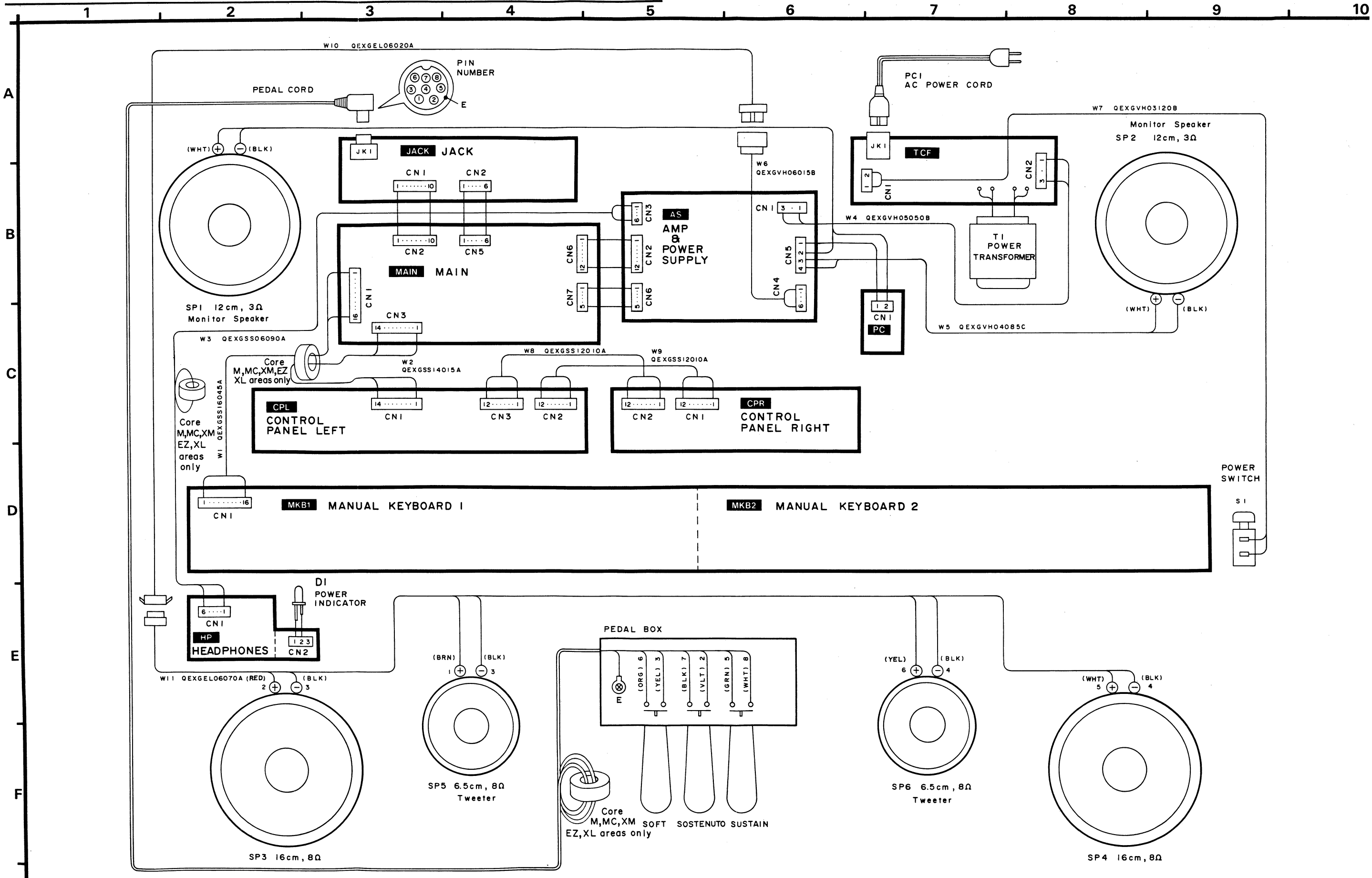
- Capacitors without symbolic mark are POLYESTER CAPACITORS. (ECQM-type, ECQG-type, ±10% Tolerance)
- Polarized capacitors without symbolic mark are Aluminum Electrolytic Capacitors.
(ECEA—type, ±20% Tolernace)

(TABLE-2)

SYMBOL	SPECIFICATION	TYPE
Ⓝ	Non-Polarized Electrolytic Capacitors	ECEA__KN__type
Ⓨ	Non-Polarized Electrolytic (for Network System)	ECEA__Y__type
ⓂⓈ	Aluminum Electrolytic Capacitors (Low leakage current type)	ECEA__M__type
Ⓩ	Aluminum Electrolytic Capacitors (Low impedance type)	ECEA__Z__type
Ⓣ	Tantalum Solid Electrolytic Capacitors	ECS__type
Ⓣⓕ	Metalized Plastic Film Capacitors (TF Series)	ECQV__type
	Polyester Film Capacitors	ECQB__type
○	Temperature Compensating Ceramic Capacitors	ECC__type
	High-Dielectric Constant Ceramic Capacitors	ECK__type ECR__type
	Ceramic Capacitors (Cylinder type)	ECBA__type
	Metalized Polyester Film Capacitors for Across the Line	ECQ__EW__type
	Aluminum Electrolytic Capacitors for Smoothing Circuit	ECES__type
	Multilayer Ceramic Chip Capacitors	ECUV__type

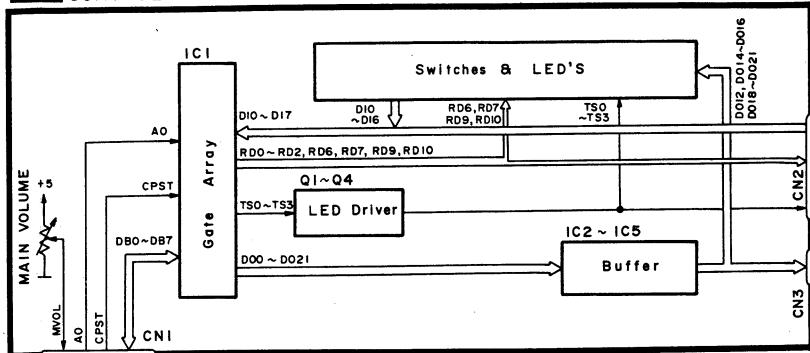
MEMO

WIRING CONNECTION DIAGRAM

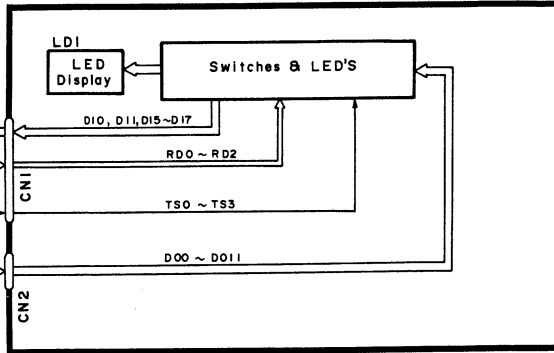




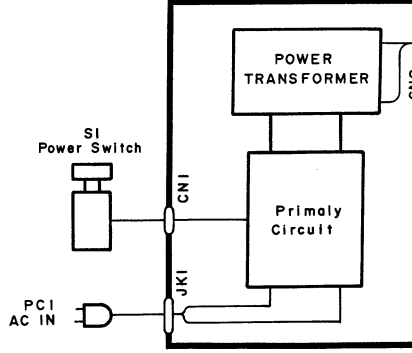
CPL CONTROL PANEL LEFT CIRCUIT



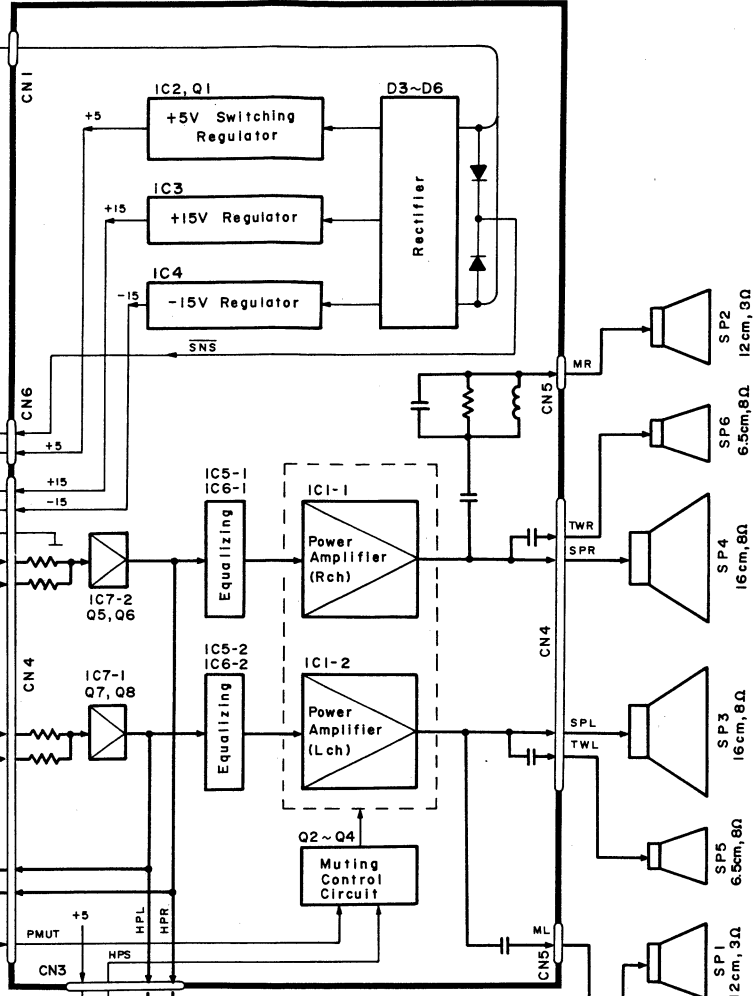
CPR CONTROL PANEL RIGHT CIRCUIT



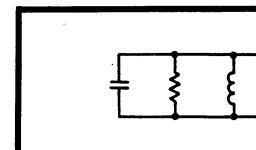
TCF TRANS & FUSE CIRCUIT



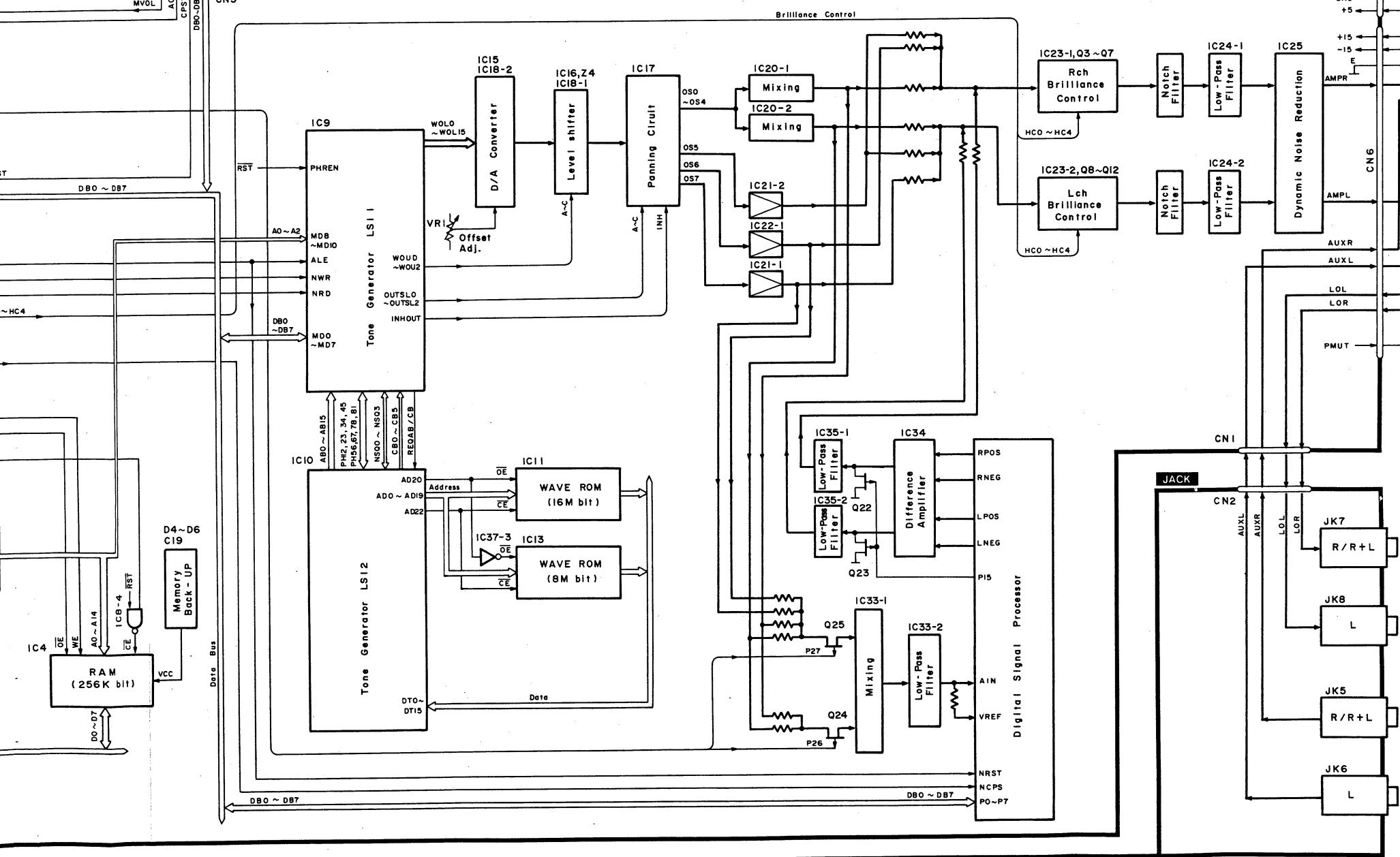
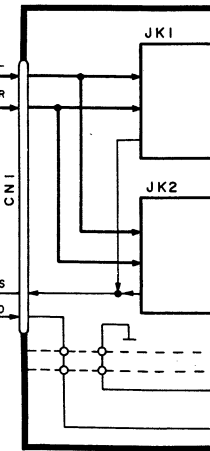
AS AMP & POWER SUPPLY CIRCUIT



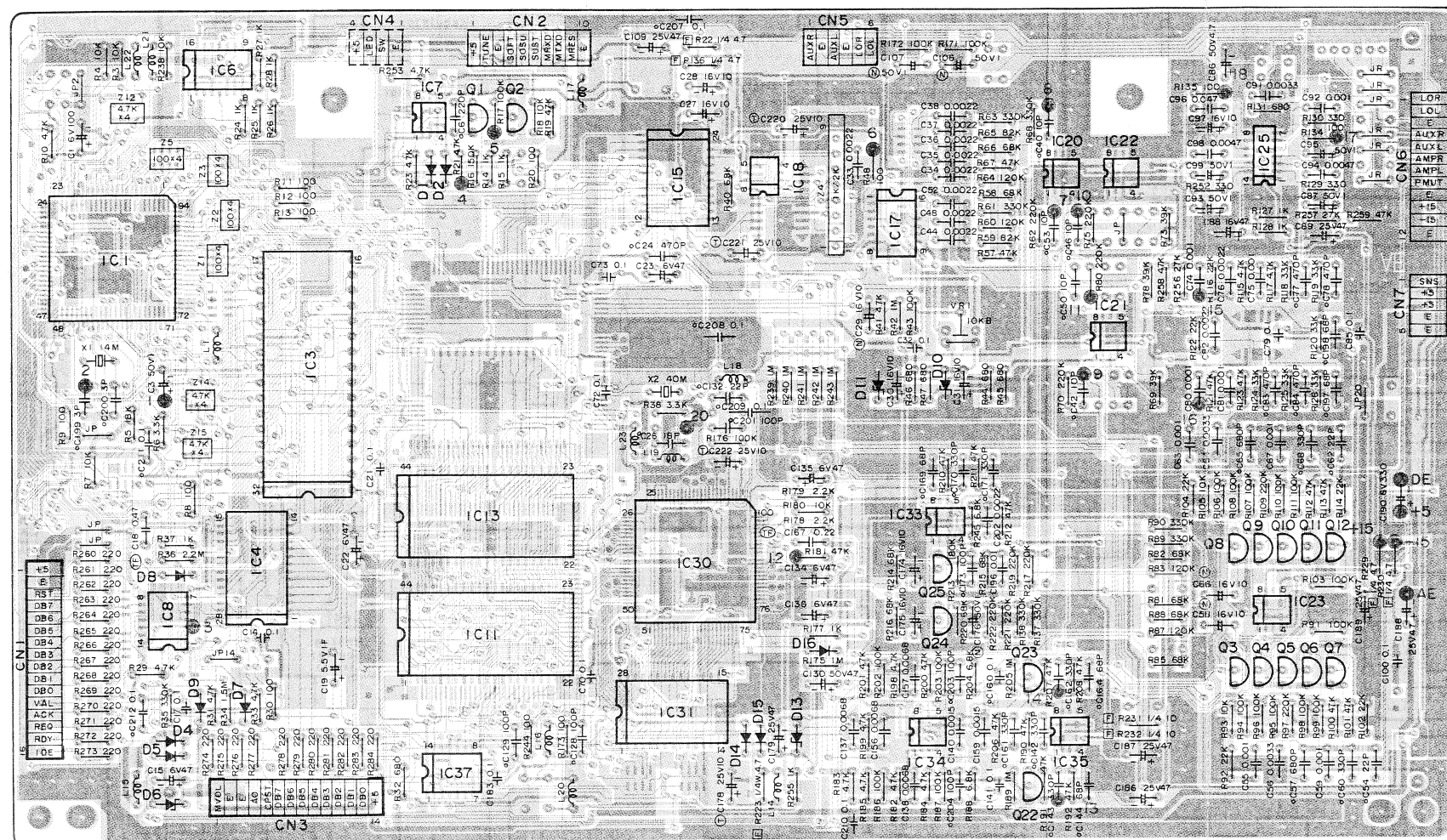
PC PEAK CANCELLER



HP HEADPHONES

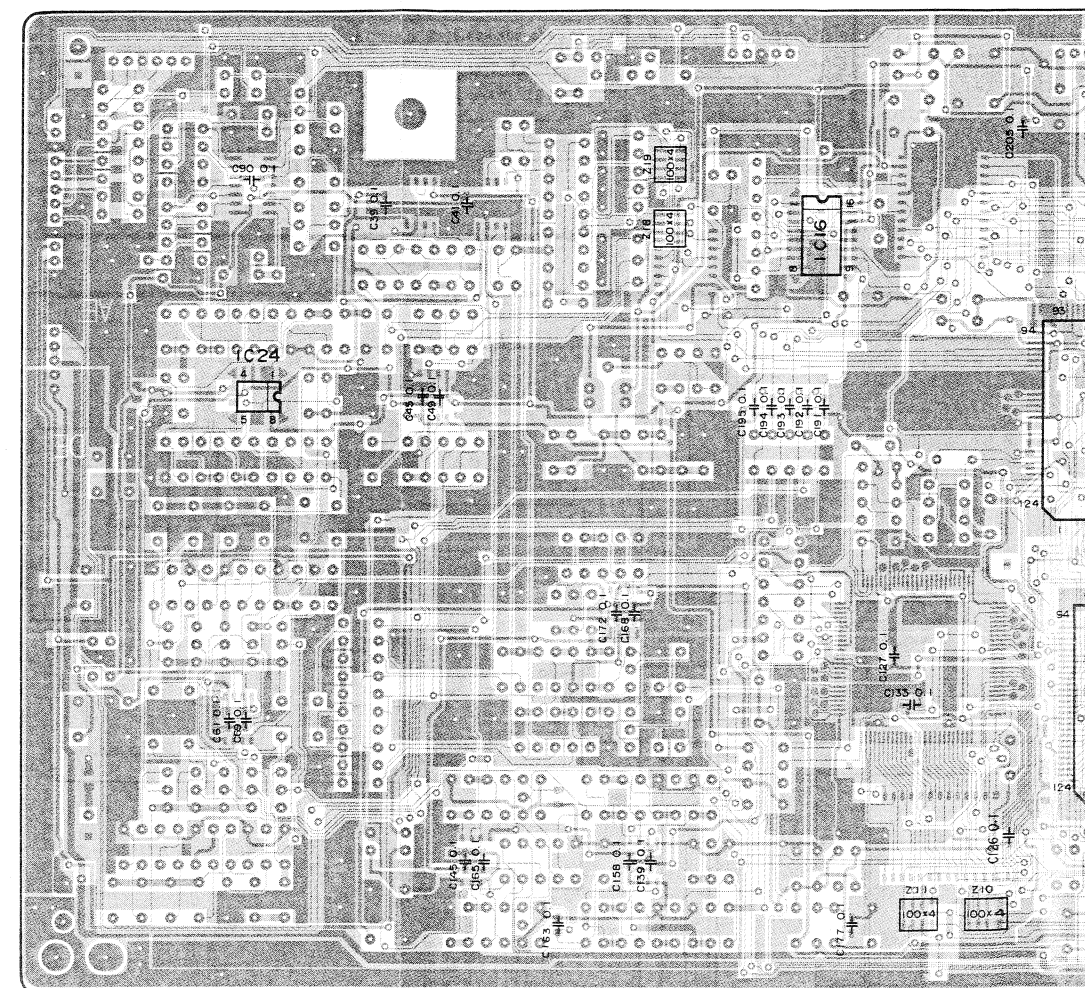


MAIN COMPONENT SIDE



Component Side
Foil Side

MAIN FOIL SIDE



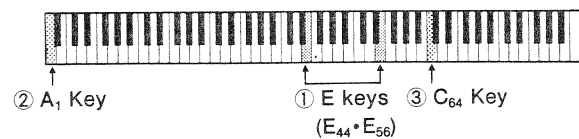
Component Side
Foil Side

Measuring Conditions

Check Point ⑤~⑧, ⑫~⑬

Set to the self-diagnostic mode followings.

- While pressing two E keys (①) simultaneously, turn on the power switch.
- SOUND..... GRAND PIANO
- Main Volume..... Max
- Keyboard A₁ (②)

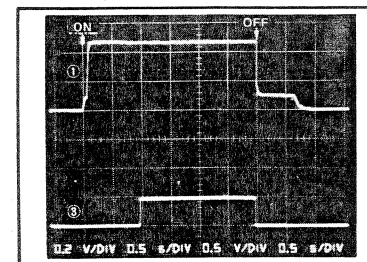


Check Point ①~⑤, ⑨~⑪

Set the initial setting mode (Refer to page I-6)

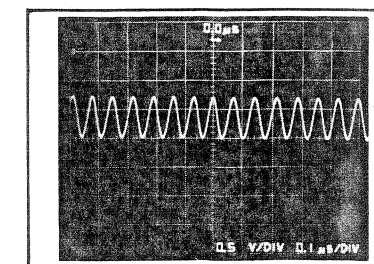
- SOUND..... GRAND PIANO
- Main Volume..... Max

① RST, ③ PMUT

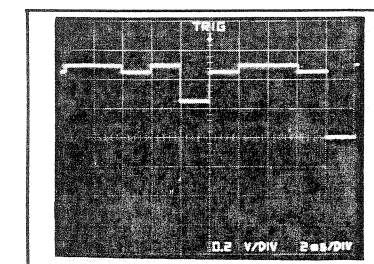


• Power Switch..... ON → OFF

② X1, 14MHz

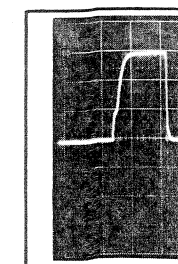


④



- TUNE..... Center
- Pedal..... OFF

⑤

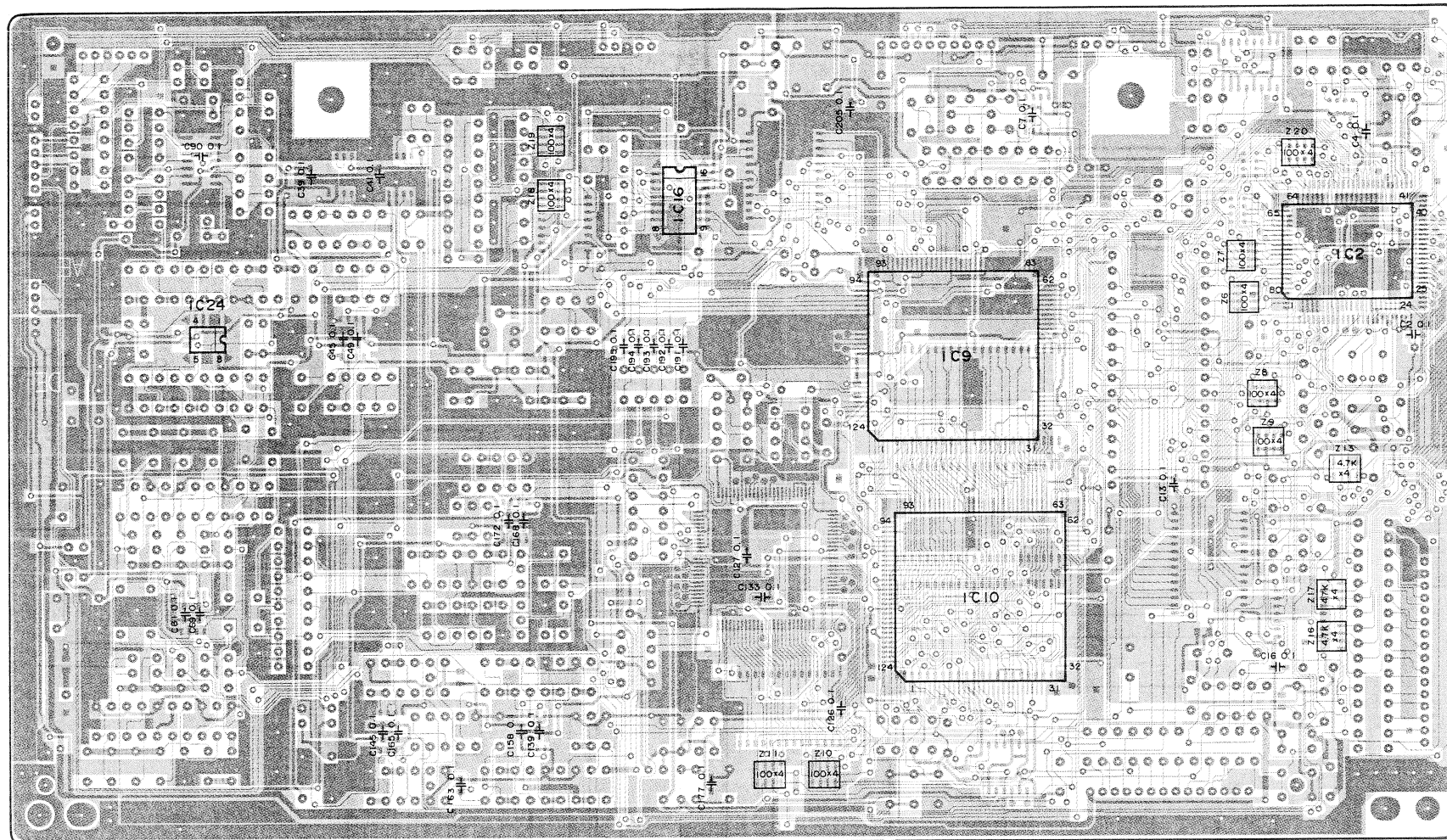
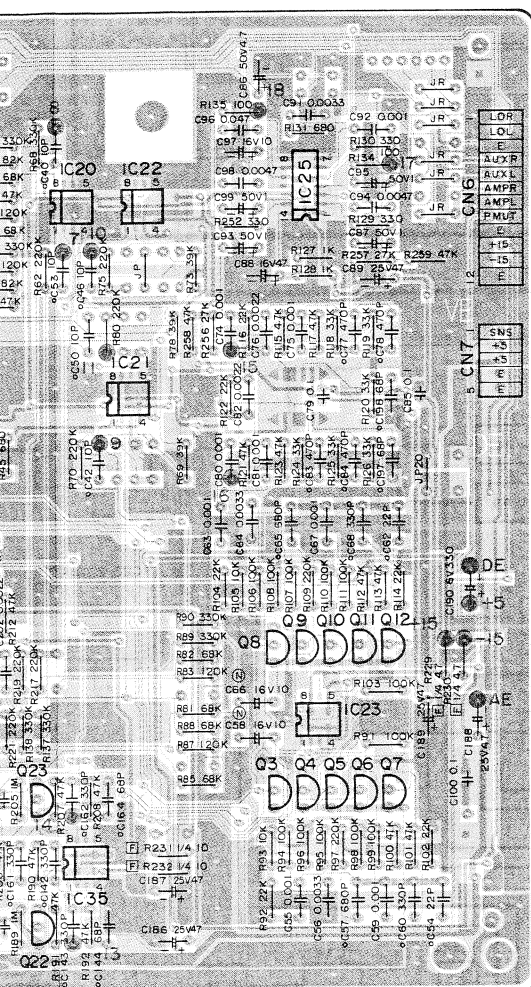


Component Side
Foil Side

MAIN FOIL SIDE

Component Side
Foil Side

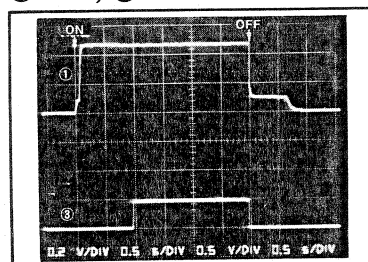
SXPG210051



NOTES:

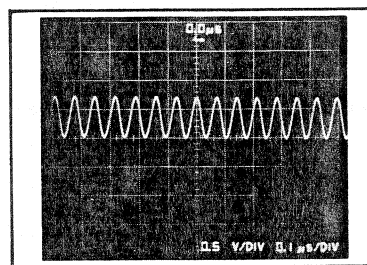
- IC'S
 - IC1: SVIGD70320GJ
 - IC2: D65012GF-A79
 - IC3: QSIGAPX73AX0
 - IC4: M5256BFP12LL
 - IC6, 16, 17: T74H4051AFT1
 - IC7, 18, 34: M5238FP
 - IC8: M74HC00FP
 - IC9: MN73012PGC
 - IC10: MN73013PGD
 - IC11: QSIGH3C16R46
 - IC13: D23C8000A801
 - IC15: PCM55HP
 - IC20~24, 33, 35: M5218AFP
 - IC25: LM1894M
 - IC30: MN199001PSA2
 - IC31: HM65256BLF10
 - IC37: M74HC04FP
- TRANSISTORS
 - Q1, 3~12, 22~25: 2SJ105GR
 - Q2: 2SC2320LFG
- DIODES
 - D1, 2, 4, 5, 7~9, 14~16: MA165TA5
 - D6, 13: MA4051MTA
 - D10, 11: MA4056

① RST, ③ PMUT

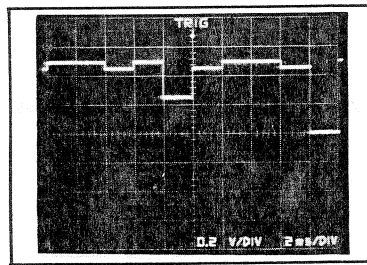


• Power Switch..... ON → OFF

② X1, 14MHz

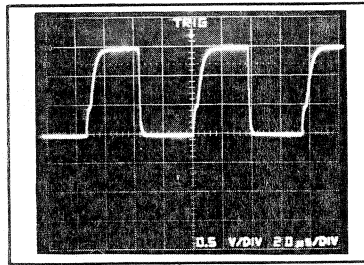


④

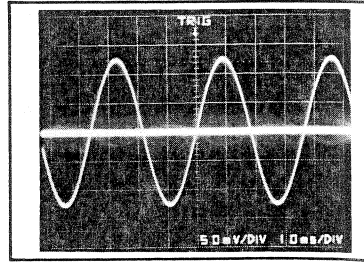


• TUNE..... Center
• Pedal..... OFF

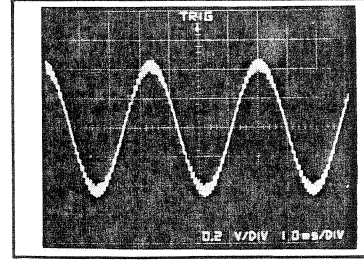
⑤



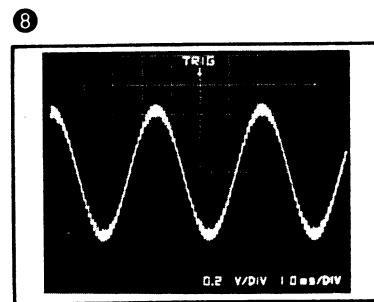
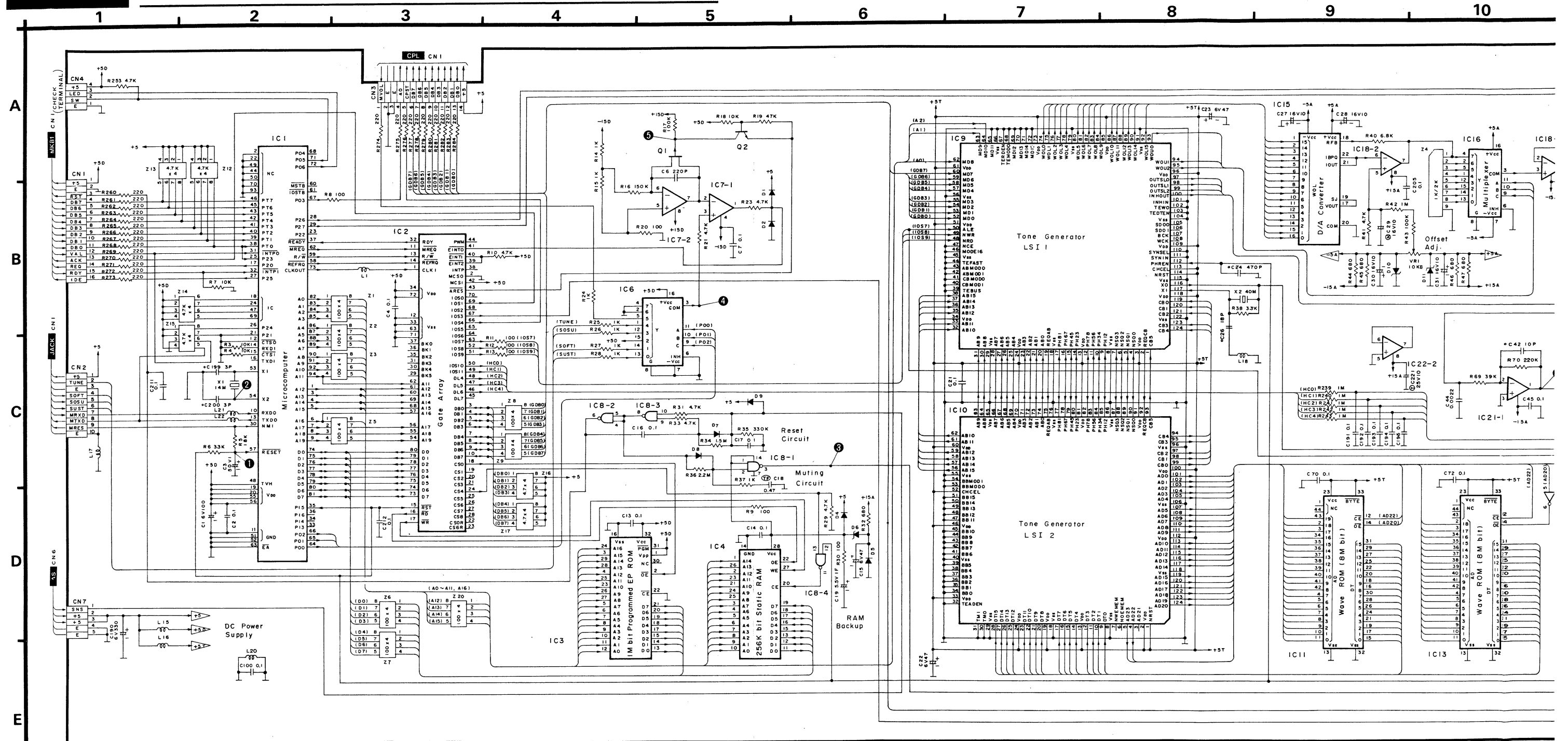
⑥



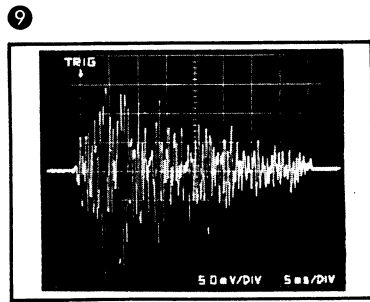
⑦



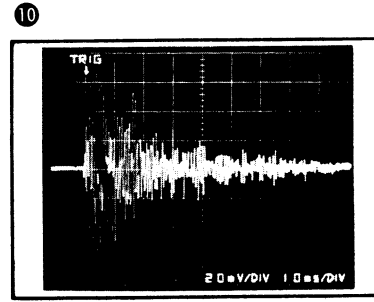
MAIN CIRCUIT DIAGRAM



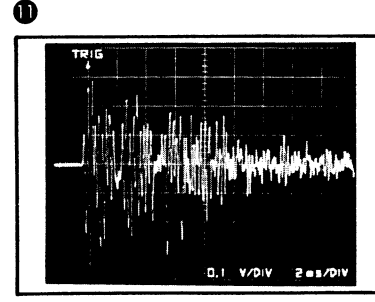
- Keyboard C₆₄ (3)



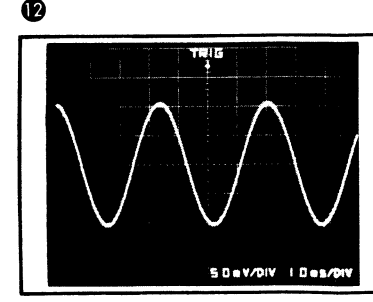
- Keyboard C₆₄ (3)



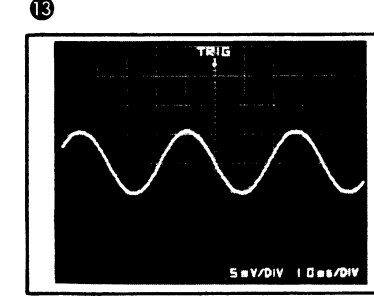
- Metronome..... ON



- Digital Reverb..... ROOM

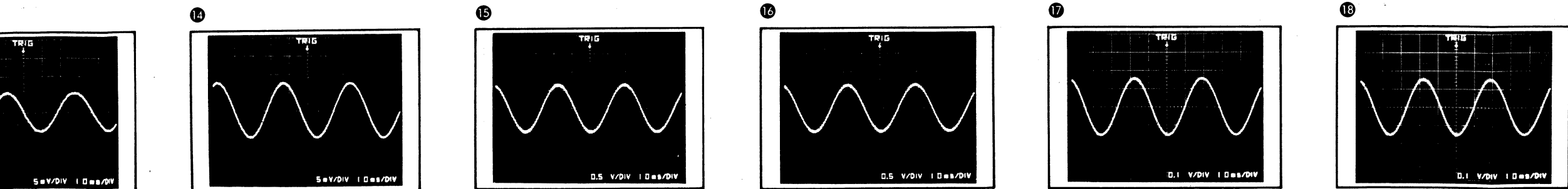
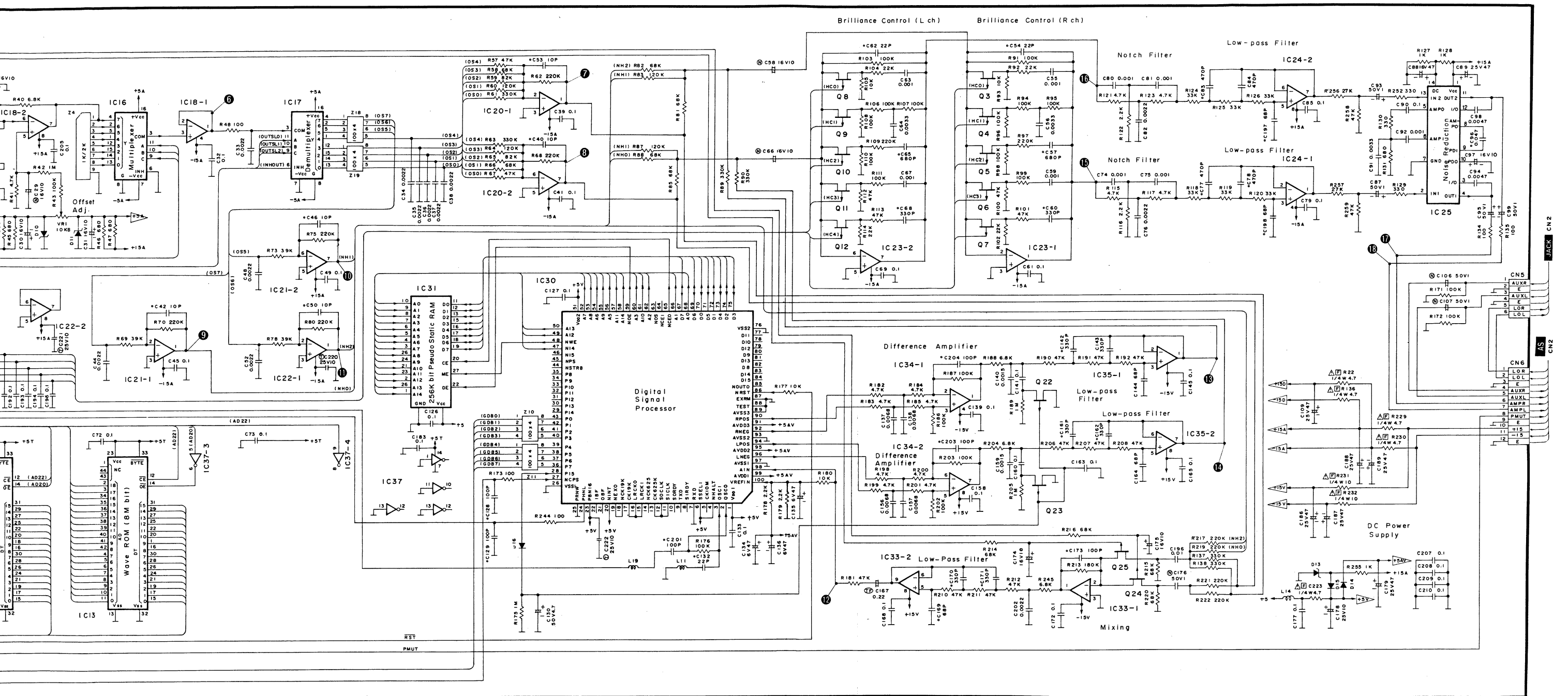


- Digital Reverb ROOM



- **Digit:**



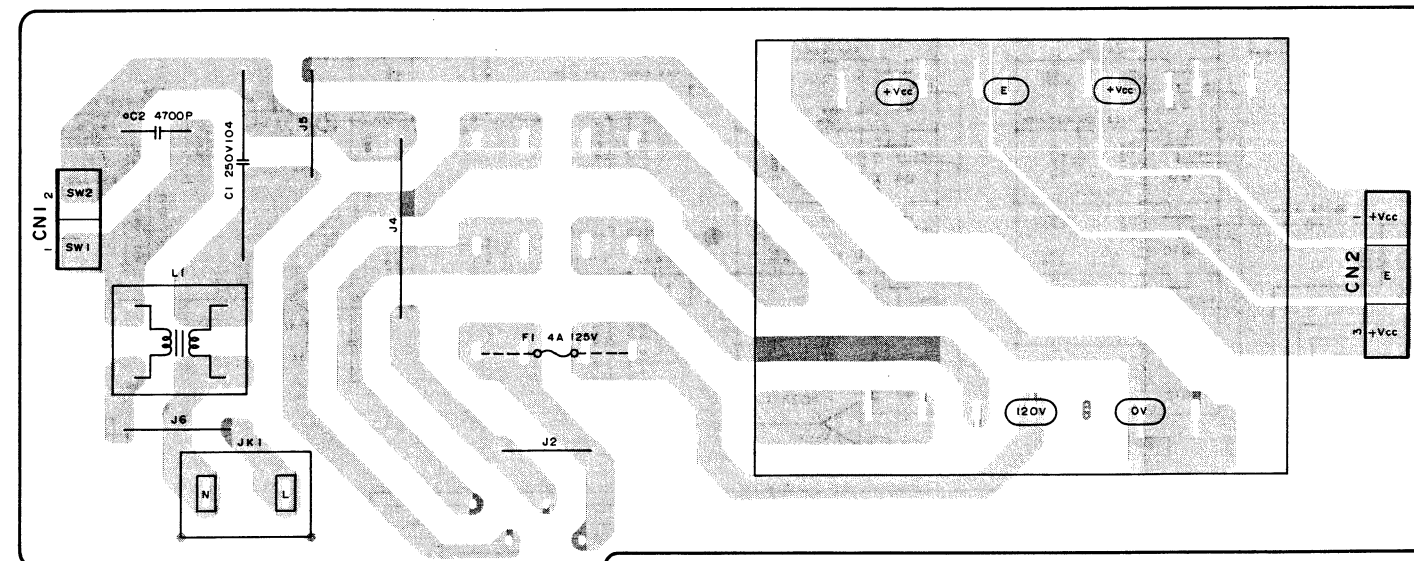


b..... ROOM

• Digital Reverb..... ROOM

TCF [M][MC][XM] areas

SXPG211021



TCF

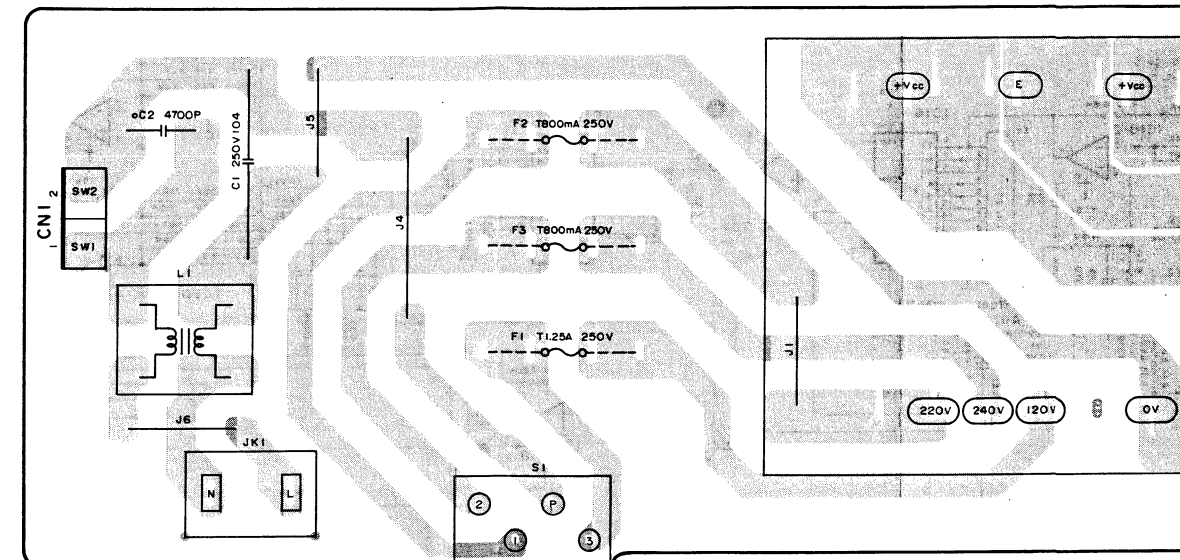
NOTE:

• FUSE

F1:

XBA1C40NU100

TCF [EK][X][XR][XS][XD][XT] areas



TCF

NOTE:

• FUSES

F1:

F2, 3:

XBA2C12TB0

XBA2C08TB0

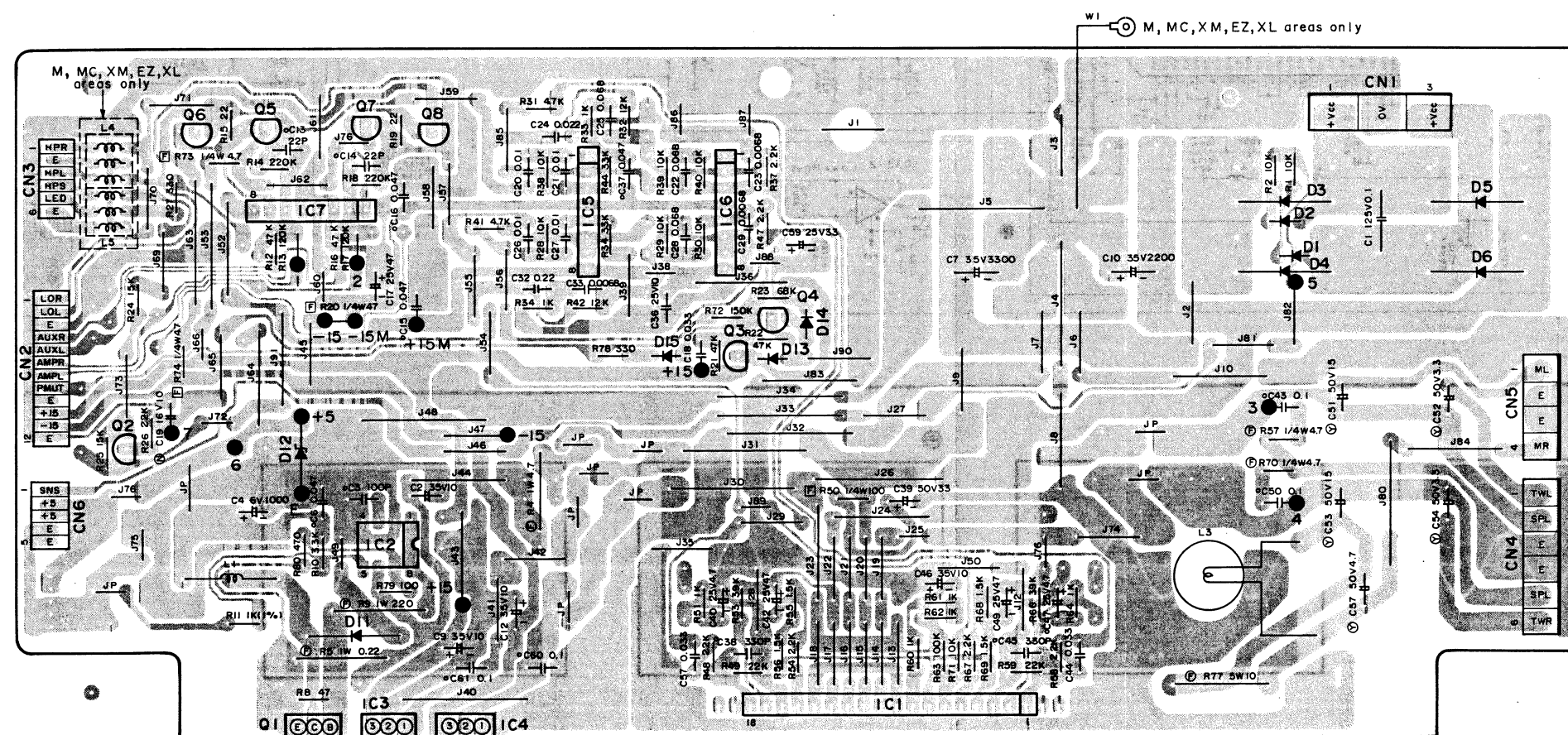
AS

• [M][MC][XM][EZ][XL] areas

SXPG210241

• Other areas

SXPG210211



AS

NOTES:

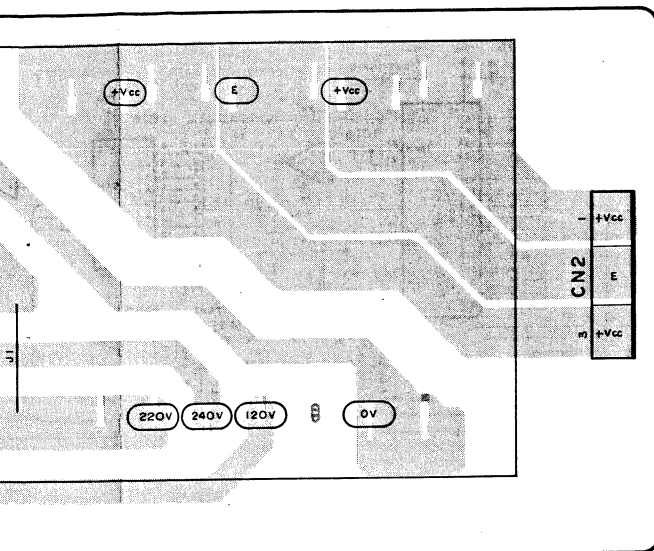
- IC'S
- IC1:
- IC2:
- IC3:
- IC4:
- IC5~7:
- TRANSISTORS
- Q1:
- Q2, 3:
- Q4:
- Q5, 7:
- Q6, 8:
- DIODES
- D1, 2:
- D3~6:
- D11:
- D12:
- D13:
- D14, 15:
- IC Protector
- IP1:

SVIGS4132M2M
SVIGM5291P
SVIGM5F7815
SVIGM5F7915
SVIGM5218L
2SA1643
2SA1015-GR
2SC2320LFG
2SC3940AR
2SA1534ARS
ERA1502V5
SVDGS3V20
SVDGRK14S
MA2062LF
EK04
MA165TAS
ICP-N25T104

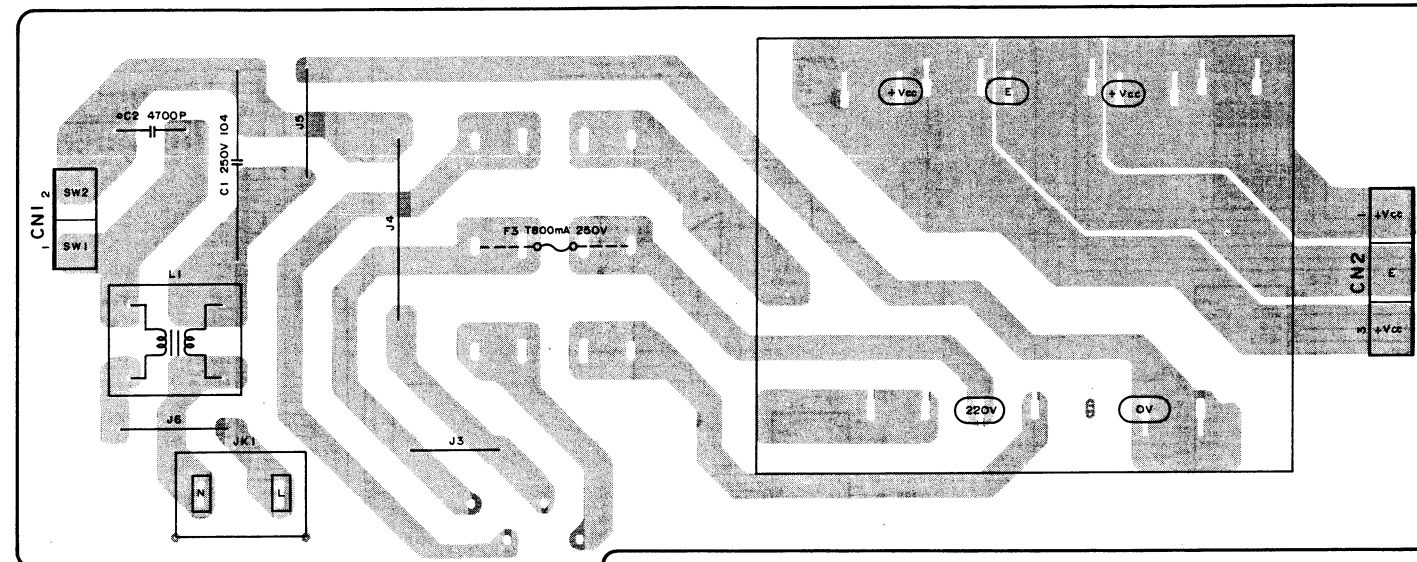
DPHONES CIRCUIT BOARD

10 11 12 13 14 15 16 17 18 19

SXPG211041



TCF Other areas

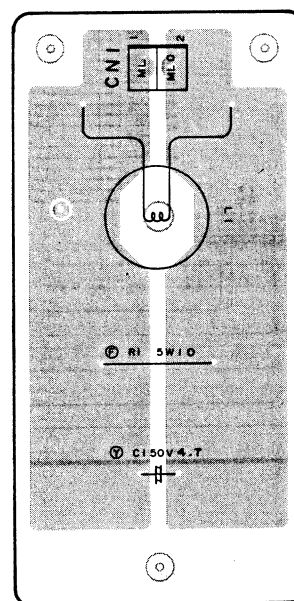


SXPG211011

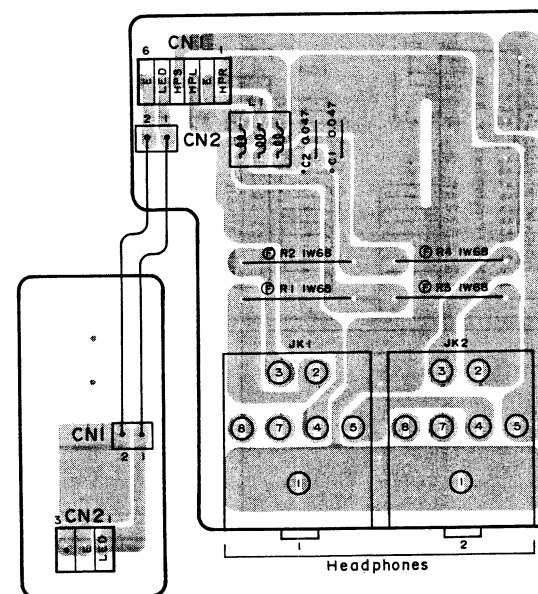
TCF
NOTE:
• FUSE
F3: XBA2C08TB0

A2C12TB0
A2C08TB0

PC SXPG204731



HP SXPG210811



Measuring Conditions

Check Point ①~④

Set to the self-diagnostic mode followings.

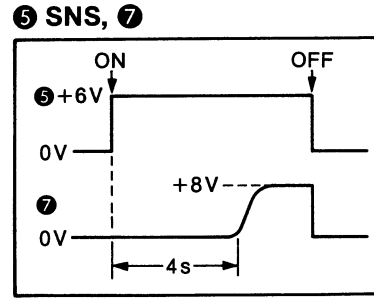
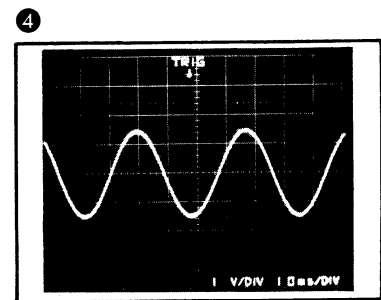
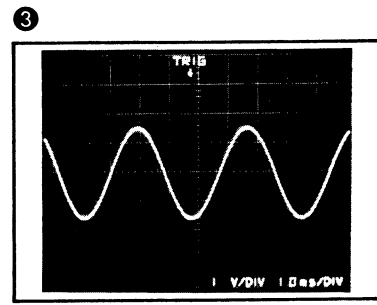
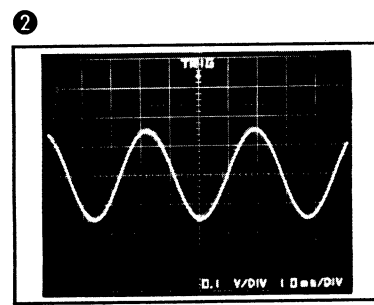
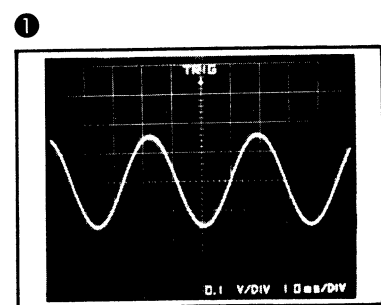
- While pressing two E keys (①) simultaneously, turn on the power switch.
- SOUND..... GRAND PIANO
- Main Volume..... Max
- Keyboard..... A₁ (②)

② A₁ Key

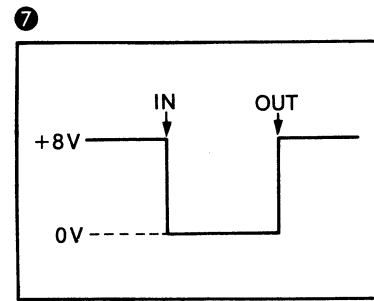
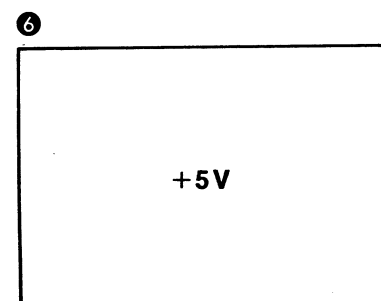
① E keys

Check Point ⑤~⑦

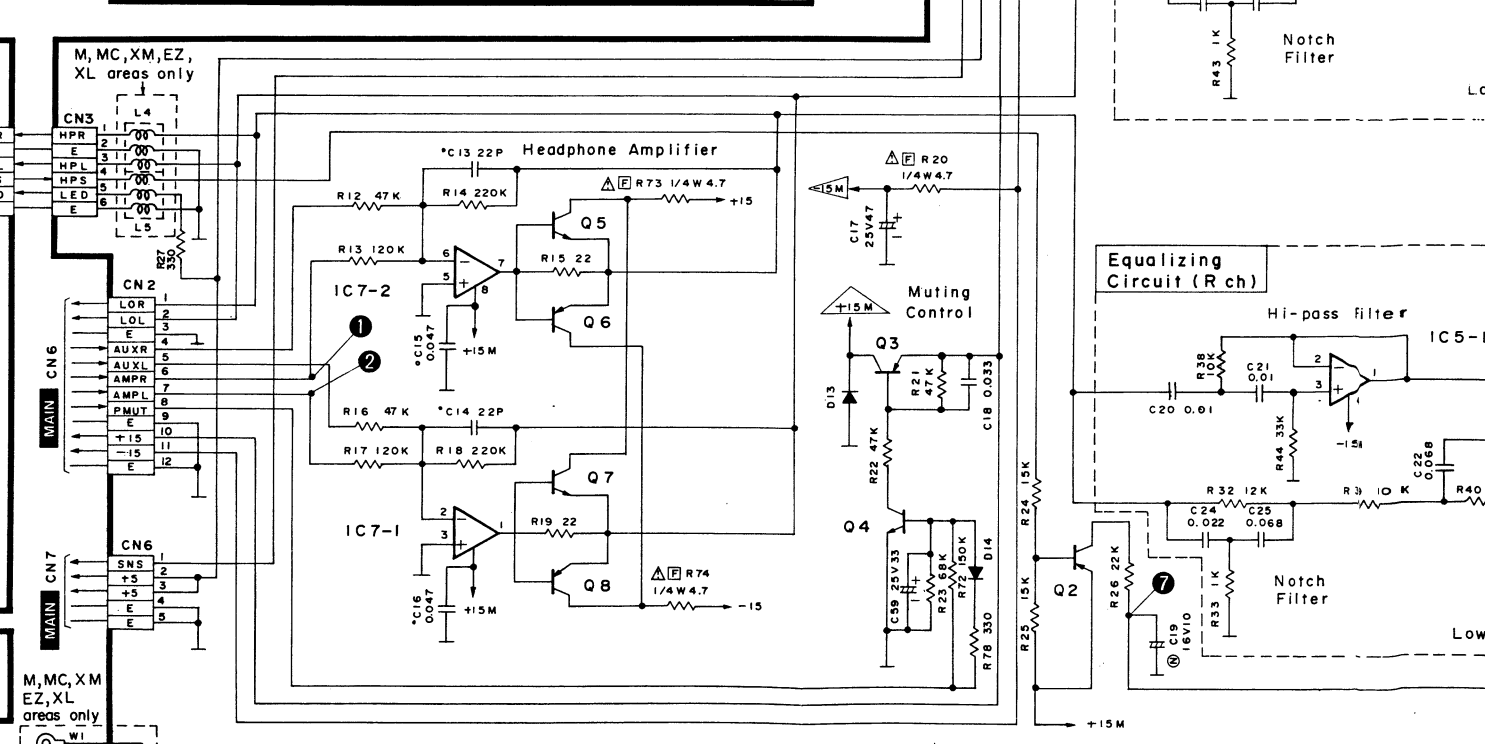
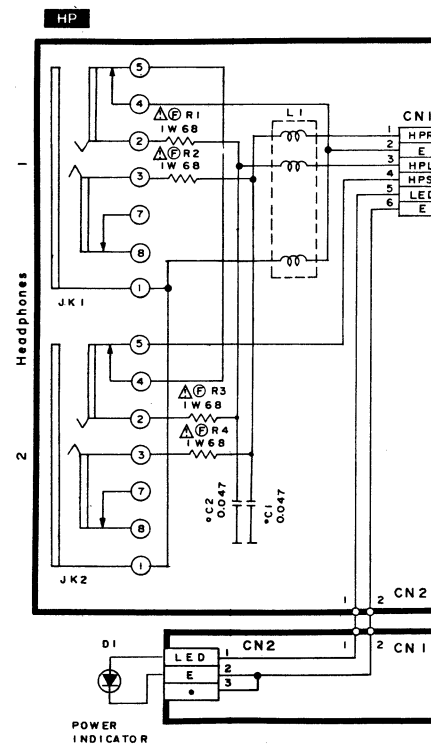
Set the initial setting mode (Refer to page I-6)



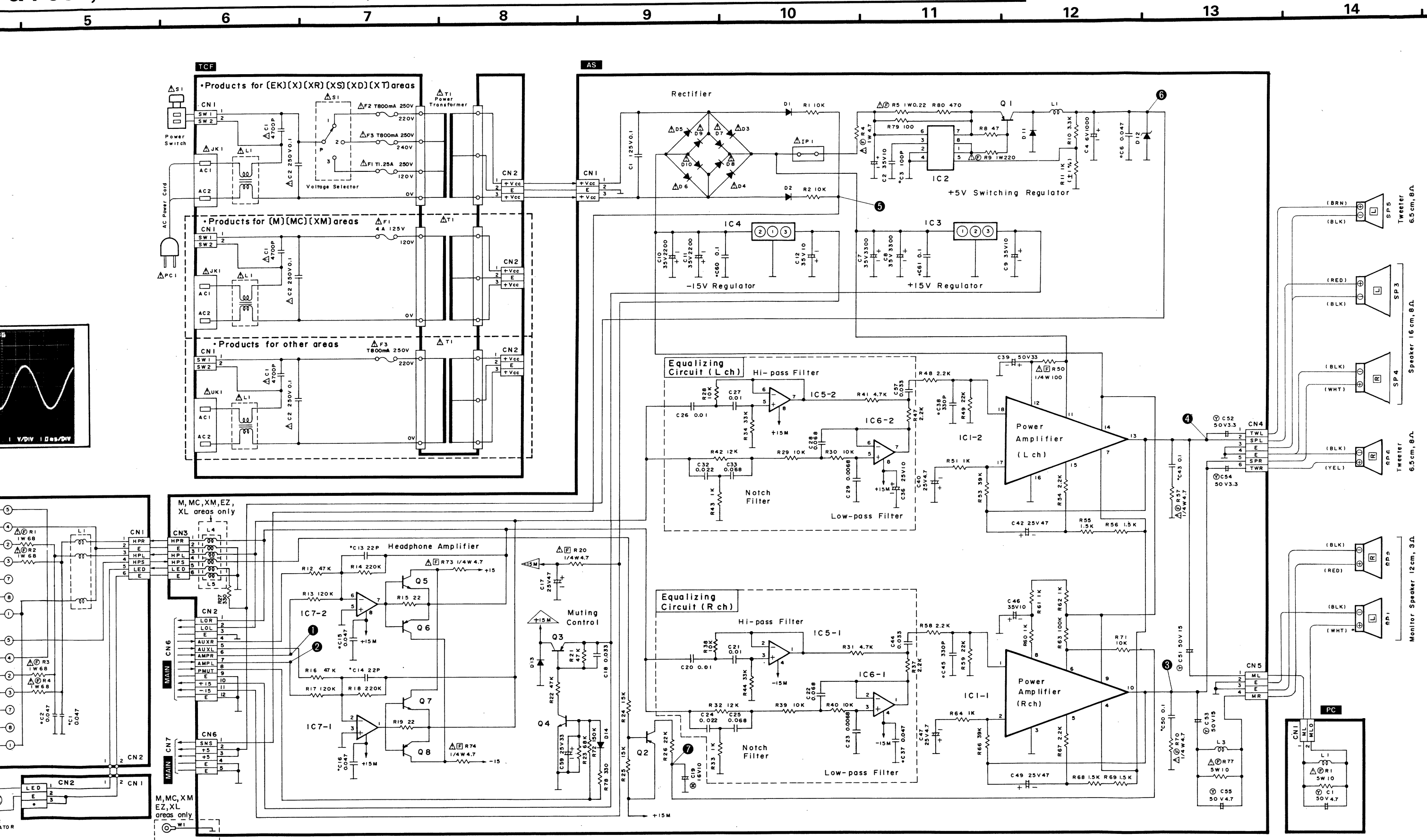
• Power Switch..... ON → OFF



• Headphones plug..... IN → OUT

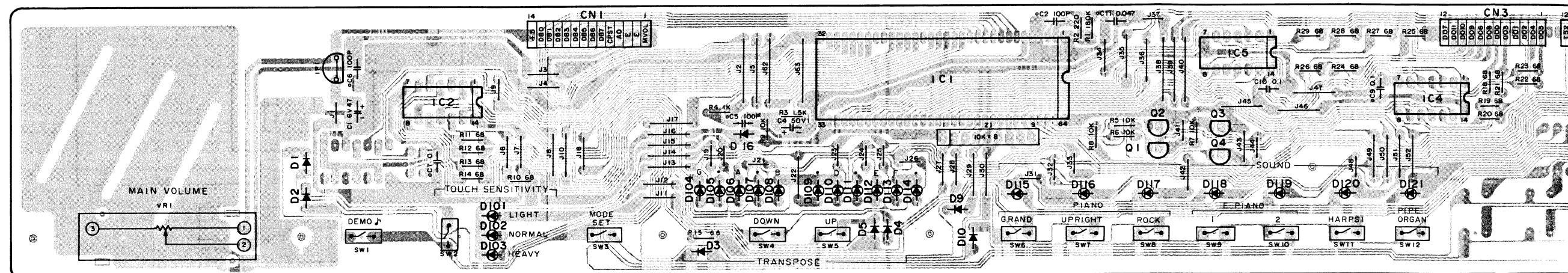


& FUSE, AMP & POWER SUPPLY, PEAK CANCELLER AND HEADPHONES CIRCUIT BOARD



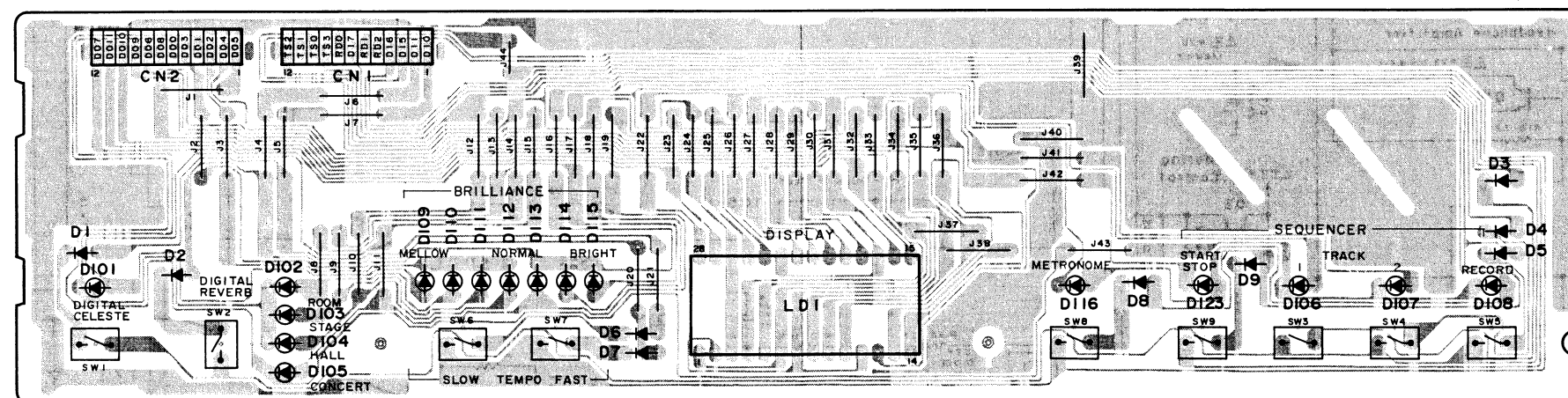
CPL

SX



CPR

SXPG210411



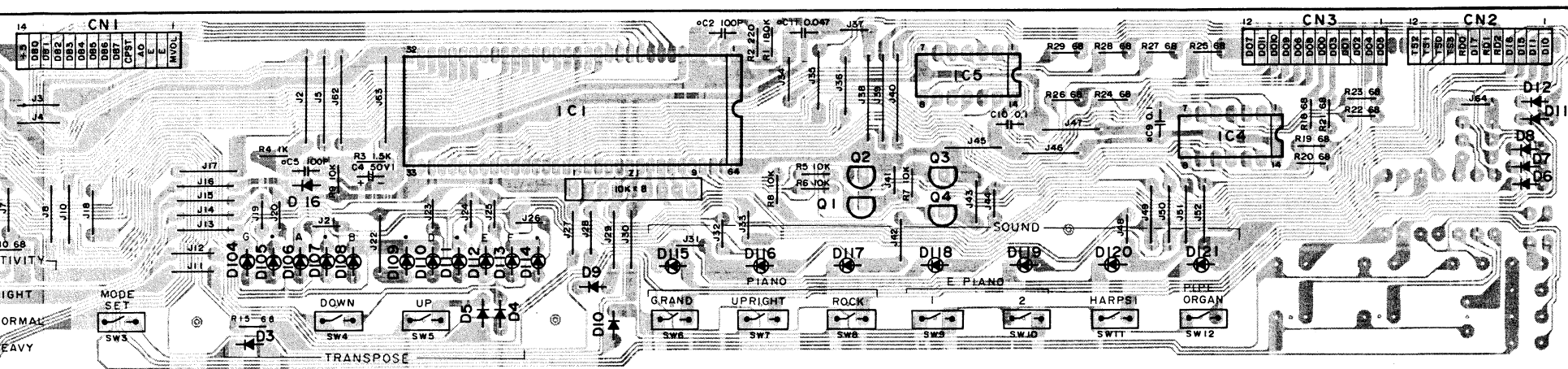
CPR

NOTES:

• DIODES

D1~9:	MA165TA5
D101~111,	LN282R
113~116, 123:	
D112:	LN382G

SXPG210311

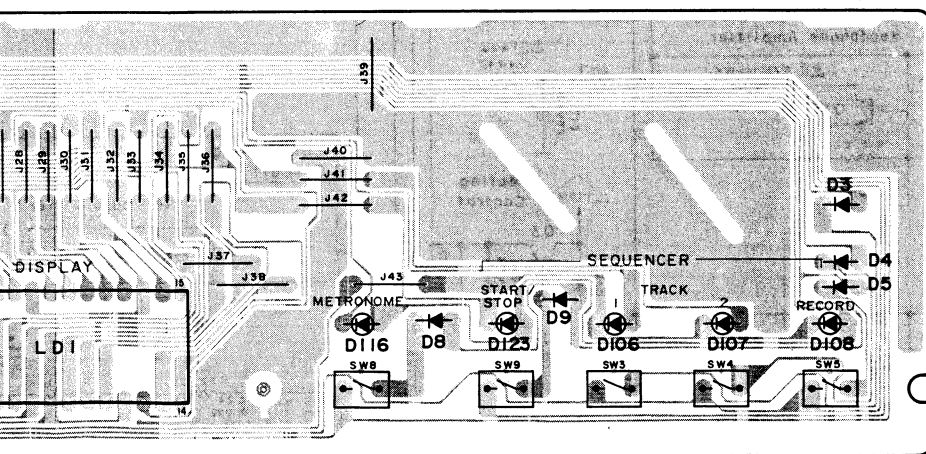


CPL

NOTES:

- IC'S
 - IC1: SVIGM603A121
 - IC2, 4, 5: SVIGM74LS07
- TRANSISTORS
 - Q1~4: 2SA830SB
- DIODES
 - D1~12, 16: MA165TA5
 - D101~121: LN282R
- IC PROTECTOR
 - IP1: ICP-N10T104

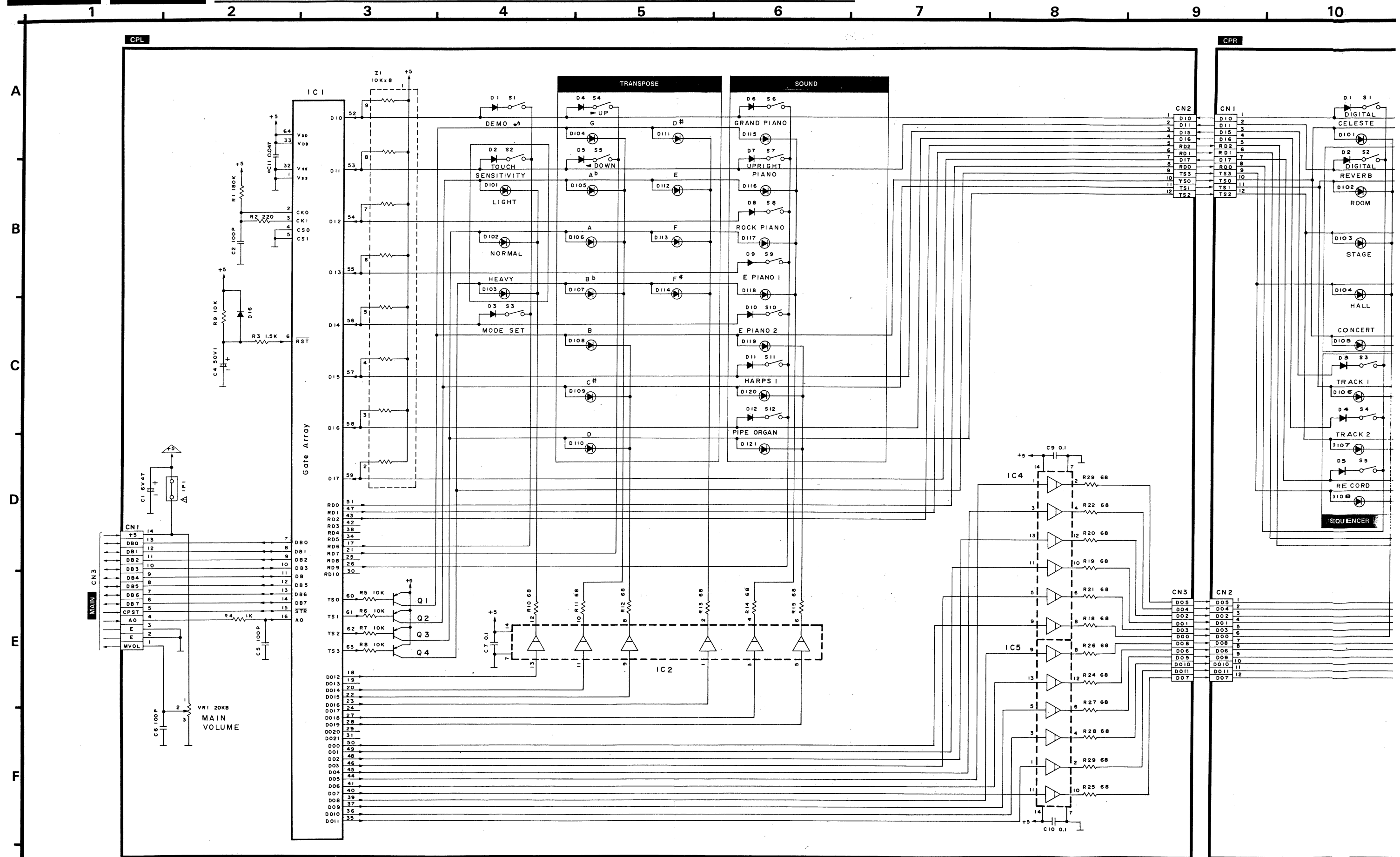
SXPG210411



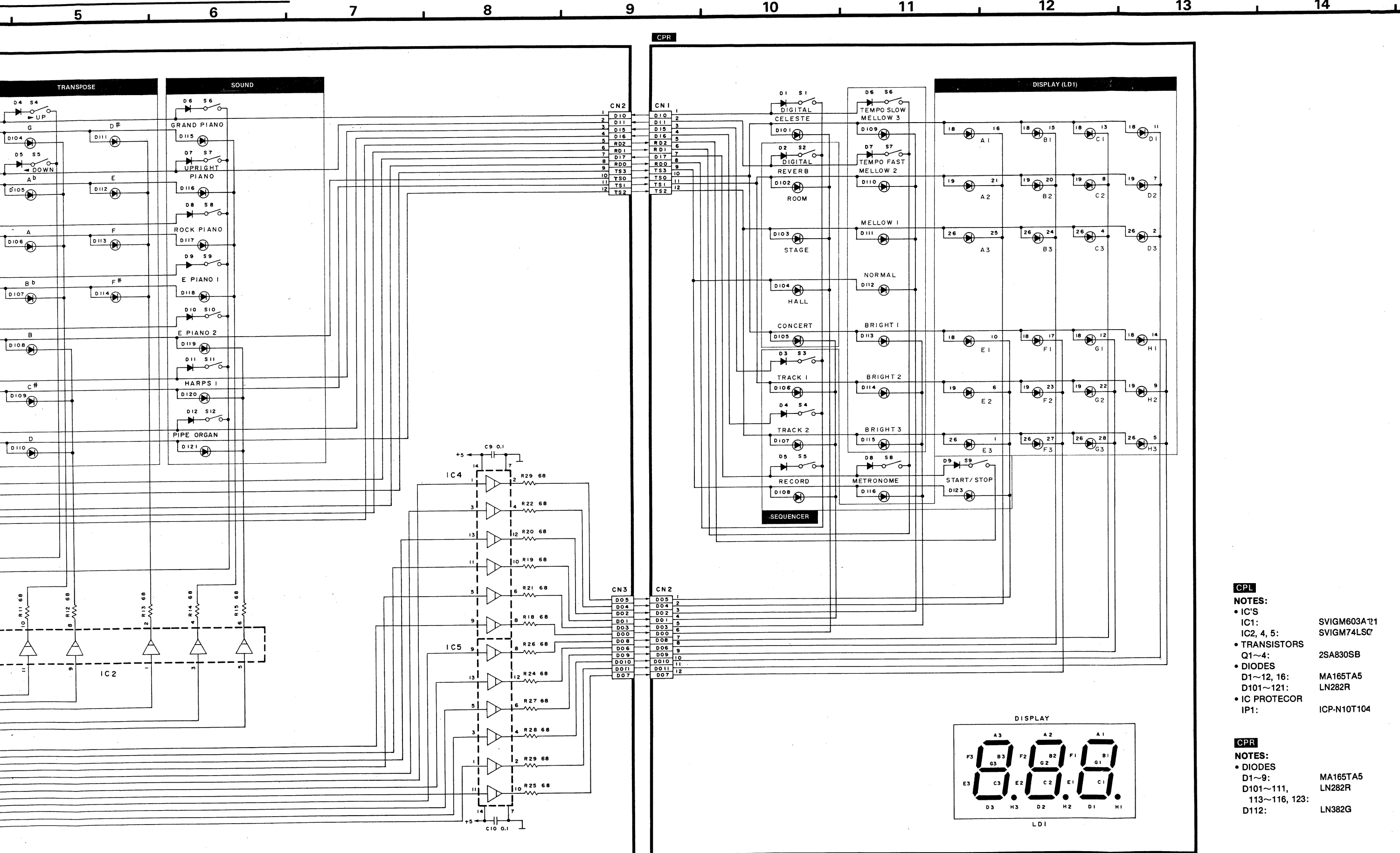
CPR

NOTES:

- DIODES
 - D1~9: MA165TA5
 - D101~111, 113~116, 123: LN282R
 - D112: LN382G

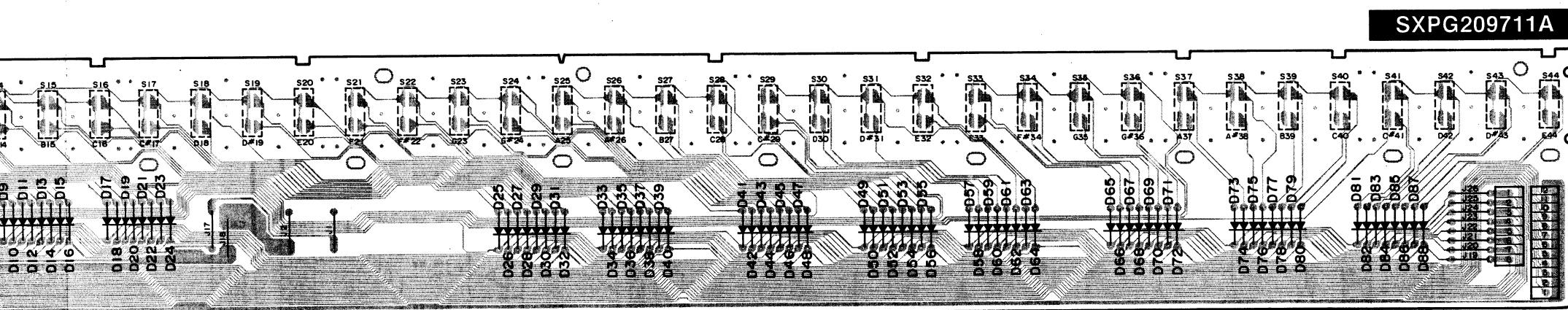
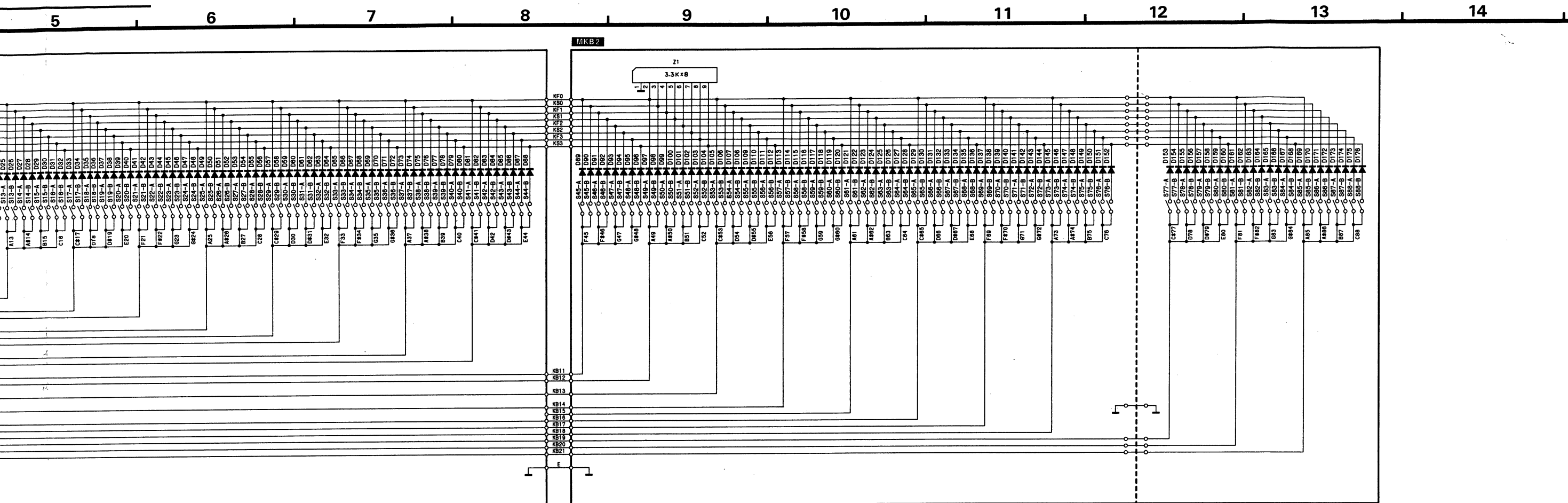


GHT CIRCUIT DIAGRAM



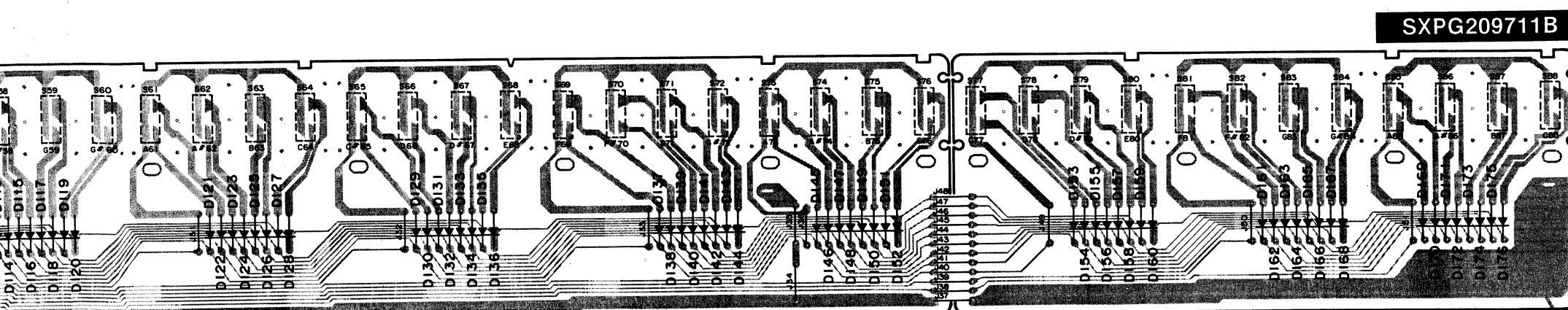
- CPL**
NOTES:
 • IC'S
 IC1: SVIGM603A121
 IC2, 4, 5: SVIGM74LS07
 • TRANSISTORS
 Q1~4: 2SA830SB
 • DIODES
 D1~12, 16: MA165TA5
 D101~121: LN282R
 • IC PROTECTOR
 IP1: ICP-N10T104

- CPR**
NOTES:
 • DIODES
 D1~9: MA165TA5
 D101~111, 123: LN282R
 D112: LN382G



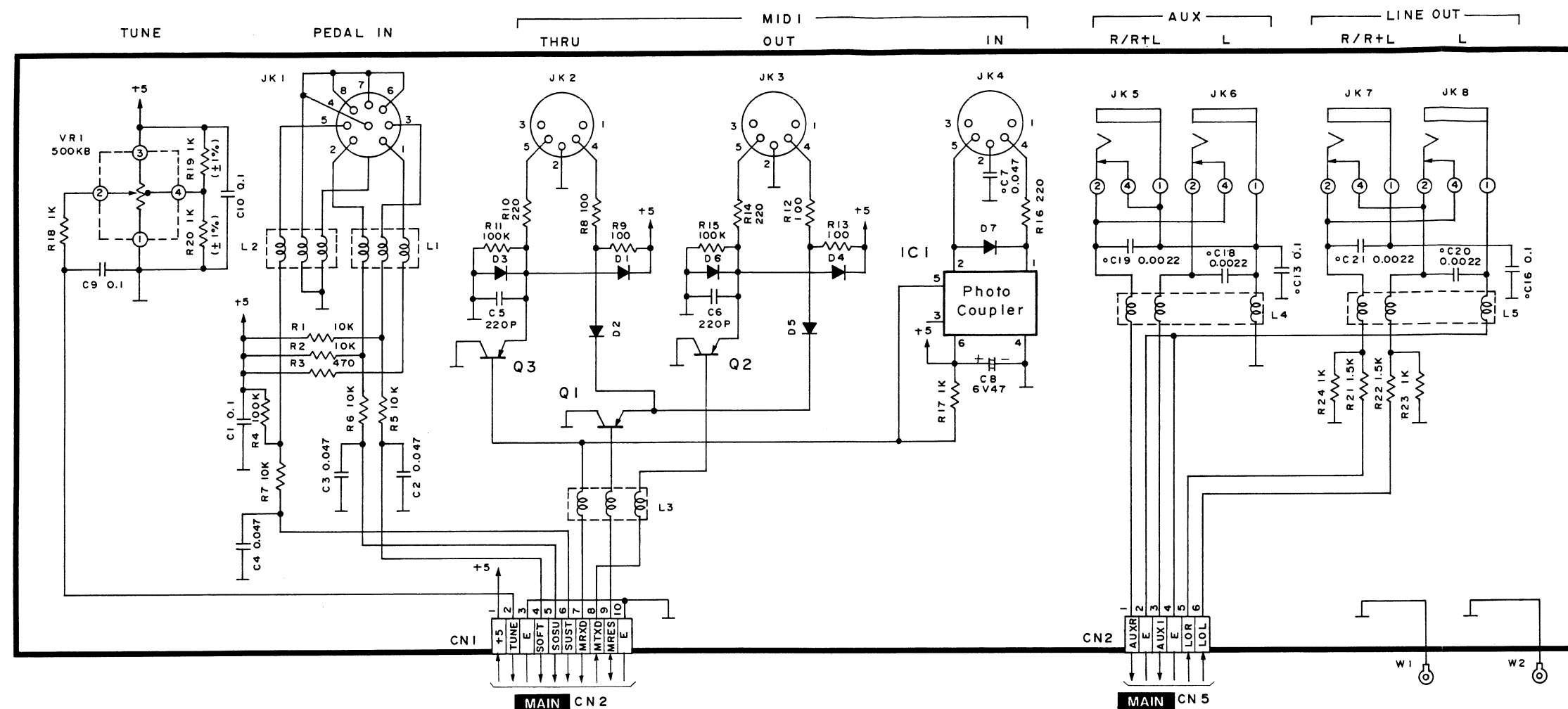
MKB 1
NOTES:
 • IC'S
 IC1:
 IC2:
 • DIODES
 D1~88:

MSM7U042016
 BR93CS46
 MA162A

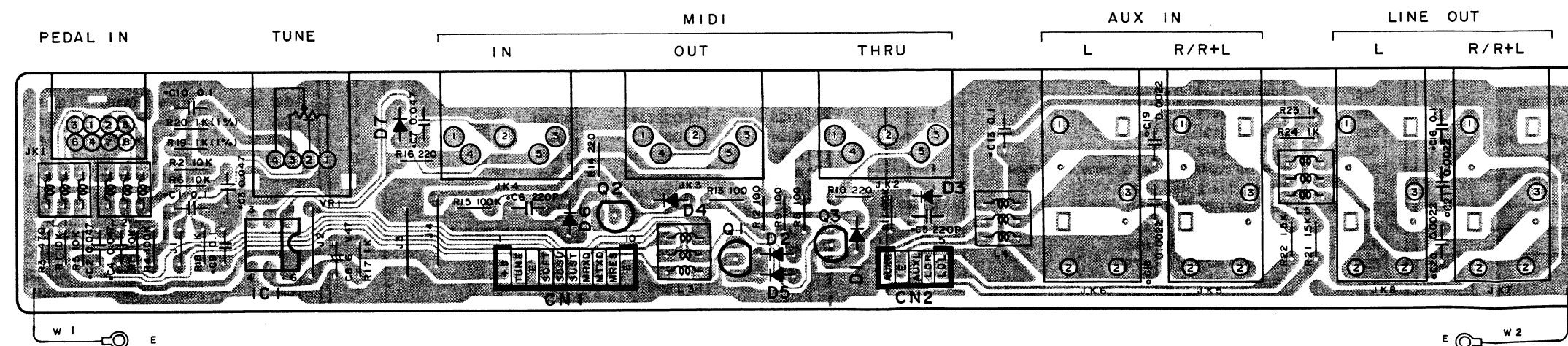


MKB 2
NOTES:
 • DIODES
 D1~88:

MA162A



SXPG209811



JACK

NOTES:

- IC
- IC1:
- TRANSISTORS
- Q1~3:
- DIODES
- D1~7:

SVIGTLP513
2SA1015-GR
MA165TA5

REPLACEMENT PARTS LIST.....P.C.B. and Wiring Parts

- Notes:**
1. Printed circuit board assembly with mark (NLA) is no longer available after production discontinuation of the complete set.
 2. Important safety notice
Components identified by $\triangle$ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
 3. The "S" mark is service standard parts and may differ from production parts.
 4. $\bigcirc$ mark are new parts.
 5. For part No. with area mark, check the area when placing an order.

■ PRINTED CIRCUIT BOARD

	NLA	Area	Part No.	Description	Per/Set
$\bigcirc$	NLA		SXPG210051	MAIN	1
$\bigcirc$	NLA	M MC XM	SXPG211021	TCF	1
$\bigcirc$	NLA	EK X XR	SXPG211041	TCF	1
		XS XD XT			
$\bigcirc$	NLA	Others	SXPG211011	TCF	1
$\textcircled{S}$	NLA		SXPG210241	AS	1
$\bigcirc$	NLA		SXPG204731	PC	1
$\bigcirc$	NLA		SXPG210811	HP	1
$\bigcirc$	NLA		SXPG210311	CPL	1
$\bigcirc$	NLA		SXPG210411	CPR	1
$\bigcirc$	NLA		SXPG209711A	MKB1	1
$\bigcirc$	NLA		SXPG209711B	MKB2	1
$\bigcirc$	NLA		SXPG209811	JACK	1

MAIN MAIN CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
$\bigcirc$	IC1	SVIGD70320GJ	16 bit Microcomputer
	IC2	D65012GF-A79	Gate Array
	IC3	QSIGAPX73AX0	1M bit Programmed EP ROM
	IC4	M5256BFP12LL	256K bit static RAM
	IC6, 16, 17	T74H4051AFT1	8 Channel Multiplexer
	IC7, 18, 34	M5238FP	Operational Amplifier
	IC8	M74HC00FP	Quad 2-input NAND Gates
	IC9	MN73012PGC	Tone Generator LSI 1
	IC10	MN73013PGD	Tone Generator LSI 2
$\bigcirc$	IC11	QSIGH3C16R46	16M bit Wave ROM
$\bigcirc$	IC13	D23C8000A801	8M bit Wave ROM
	IC15	PCM55HP	D-A Converter
	IC20~24, 33, 35	M5218AFP	Operational Amplifier
$\bigcirc$	IC25	LM1894M	Dynamic Noise Reduction
	IC30	MN199001PSA2	Digital Signal Processor
	IC31	HM65256BLF10	256K bit Pseudo Static RAM
	IC37	M74HC04FP	Hex Inverters
TRANSISTORS			
	Q1, 3~12, 22~25	2SJ105GR	FET
S	Q2	2SC2320LFG	2SC1310FG (SUB. Part)
DIODES			
	D1, 2, 4, 5, 7~9, 14~16	MA165TA5	Diode

Ref. No.	Part No.	Description	Per/Set
D6, 13	MA4051MTA	Zener, 5.1V	2
D10, 11	MA4056	Zener, 5.6V	2
OSCILLATORS			
X1	QSXG1A1400A	14MHz, Quartz Oscillator	1
X2	QSXG1B4000B	40MHz, Quartz Oscillator	1
COMPONENT COMBINATIONS			
$\bigcirc$ Z1~3, 5~11, 18~20	EXBS8V101J	100 Ω $\times$ 4	13
Z4	EXAMR14A1002	1k Ω /2k Ω , Ladder Network	1
$\bigcirc$ Z12~17	EXBS8V472J	4.7k Ω $\times$ 4	6
COILS			
L1, 14~17, 19~22	QLQGT1B600MA	Coil	9
L18, 23	QLBG002A	Coil	2
SEMI-FIXED RESISTOR			
VR1	EVSG0E1B103A	10k Ω B, Offset Adj.	1
RESISTORS			
R3, 4	ERDS2TJ103	10k Ω	2
R5	ERDS2TJ183	18k Ω	1
R6	ERDS2TJ332	3.3k Ω	1
R7	ERDS2TJ103	10k Ω	1
R8, 9	ERDS2TJ101	100 Ω	2
R10	ERDS2TJ472	4.7k Ω	1
R11~13	ERDS2TJ101	100 Ω	3
R14, 15	ERDS2TJ102	1k Ω	2
R16	ERDS2TJ154	150k Ω	1
R17	ERDS2TJ104	100k Ω	1
R18	ERDS2TJ103	10k Ω	1
R19	ERDS2TJ473	47k Ω	1
R20	ERDS2TJ101	100 Ω	1
R21	ERDS2TJ472	4.7k Ω	1
R22	$\triangle$ ERD2FCVJ4R7	4.7 Ω , 1/4W, Fuse Type	1
R23	ERDS2TJ472	4.7k Ω	1
R24~28	ERDS2TJ102	1k Ω	5
R29	ERDS2TJ472	4.7k Ω	1
R30	ERDS2TJ101	100 Ω	1
R31	ERDS2TJ472	4.7k Ω	1
R32	ERDS2TJ681	680 Ω	1
R33	ERDS2TJ472	4.7k Ω	1
R34	ERDS2TJ155	1.5M Ω	1
R35	ERDS2TJ334	330k Ω	1
R36	ERDS2TJ225	2.2M Ω	1
R37	ERDS2TJ102	1k Ω	1
R38	ERDS2TJ332	3.3k Ω	1

Ref. No.	Part No.	Description	Per/Set
R40	ERDS2TJ682	6.8k Ω	1
R41	ERDS2TJ472	4.7k Ω	1
R42	ERDS2TJ105	1M Ω	1
R43	ERDS2TJ104	100k Ω	1
R44~47	ERDS2TJ681	680 Ω	4
R48	ERDS2TJ101	100 Ω	1
R57	ERDS2TJ473	47k Ω	1
R58	ERDS2TJ683	68k Ω	1
R59	ERDS2TJ823	82k Ω	1
R60	ERDS2TJ124	120k Ω	1
R61	ERDS2TJ334	330k Ω	1
R62	ERDS2TJ224	220k Ω	1
R63	ERDS2TJ334	330k Ω	1
R64	ERDS2TJ124	120k Ω	1
R65	ERDS2TJ823	82k Ω	1
R66	ERDS2TJ683	68k Ω	1
R67	ERDS2TJ473	47k Ω	1
R68	ERDS2TJ224	220k Ω	1
R69	ERDS2TJ393	39k Ω	1
R70	ERDS2TJ224	220k Ω	1
R73	ERDS2TJ393	39k Ω	1
R75	ERDS2TJ224	220k Ω	1
R78	ERDS2TJ393	39k Ω	1
R80	ERDS2TJ224	220k Ω	1
R81, 82	ERDS2TJ683	68k Ω	2
R83	ERDS2TJ124	120k Ω	1
R85	ERDS2TJ683	68k Ω	1
R87	ERDS2TJ124	120k Ω	1
R88	ERDS2TJ683	68k Ω	1
R89, 90	ERDS2TJ334	330k Ω	2
R91	ERDS2TJ104	100k Ω	1
R92	ERDS2TJ223	22k Ω	1
R93	ERDS2TJ103	10k Ω	1
R94~96	ERDS2TJ104	100k Ω	3
R97	ERDS2TJ224	220k Ω	1
R98, 99	ERDS2TJ104	100k Ω	2
R100, 101	ERDS2TJ473	47k Ω	2
R102	ERDS2TJ223	22k Ω	1
R103	ERDS2TJ104	100k Ω	1
R104	ERDS2TJ223	22k Ω	1
R105	ERDS2TJ103	10k Ω	1
R106~108	ERDS2TJ104	100k Ω	3
R109	ERDS2TJ224	220k Ω	1
R110, 111	ERDS2TJ104	100k Ω	2
R112, 113	ERDS2TJ473	47k Ω	2
R114	ERDS2TJ223	22k Ω	1
R115	ERDS2TJ472	4.7k Ω	1
R116	ERDS2TJ222	2.2k Ω	1
R117	ERDS2TJ472	4.7k Ω	1
R118~120	ERDS2TJ333	33k Ω	3
R121	ERDS2TJ472	4.7k Ω	1
R122	ERDS2TJ222	2.2k Ω	1
R123	ERDS2TJ472	4.7k Ω	1
R124~126	ERDS2TJ333	33k Ω	3
R127, 128	ERDS2TJ102	1k Ω	2
R129, 130	ERDS2TJ331	330 Ω	2
R131	ERDS2TJ681	680 Ω	1
R134, 135	ERDS2TJ101	100 Ω	2
R136	$\triangle$ ERD2FCVJ4R7	4.7 Ω , 1/4W, Fuse Type	1
R137, 138	ERDS2TJ334	330k Ω	2
R171, 172	ERDS2TJ104	100k Ω	2
R173	ERDS2TJ101	100 Ω	1
R175	ERDS2TJ105	1M Ω	1
R176	ERDS2TJ104	100k Ω	1
R177	ERDS2TJ102	1k Ω	1
R178, 179	ERDS2TJ222	2.2k Ω	2
R180	ERDS2TJ103	10k Ω	1
R181	ERDS2TJ473	47k Ω	1

Ref. No.	Part No.	Description	Per/Set
R182~185	ERDS2TJ472	4.7k Ω	4
R186, 187	ERDS2TJ104	100k Ω	2
R188	ERDS2TJ682	6.8k Ω	1
R189	ERDS2TJ105	1M Ω	1
R190~192	ERDS2TJ473	47k Ω	3
R198~201	ERDS2TJ472	4.7k Ω	4
R202, 203	ERDS2TJ104	100k Ω	2
R204	ERDS2TJ682	6.8k Ω	1
R205	ERDS2TJ105	1M Ω	1
R206~208	ERDS2TJ473	47k Ω	3
R210	ERDS2TJ473	47k Ω	1
R211	ERDS2TJ473	47k Ω	1
R212	ERDS2TJ473	47k Ω	1
R213	ERDS2TJ184	180k Ω	1
R214, 215	ERDS2TJ683	68k Ω	2
R216	ERDS2TJ683	68k Ω	1
R217	ERDS2TJ224	220k Ω	1
R219	ERDS2TJ224	220k Ω	1
R220	ERDS2TJ683	68k Ω	1
R221, 222	ERDS2TJ224	220k Ω	2
R223	$\triangle$ ERD2FCVJ4R7	4.7 Ω , 1/4W, Fuse Type	1
R229, 230	$\triangle$ ERD2FCVJ4R7	4.7 Ω , 1/4W, Fuse Type	2
R231, 232	$\triangle$ ERD2FCVG100	10 Ω , 1/4W, Fuse Type	2
R238	ERDS2TJ103	10k Ω	1
R239~243	ERDS2TJ105	1M Ω	5
R244	ERDS2TJ101	100 Ω	1
R245	ERDS2TJ682	6.8k Ω	1
R252	ERDS2TJ331	330 Ω	1
R253	ERDS2TJ472	4.7k Ω	1
R255	ERDS2TJ102	1k Ω	1
R256, 257	ERDS2TJ273	27k Ω	2
R258, 279	ERDS2TJ473	47k Ω	2
R260~284	ERDS2TJ221	220 Ω	25
CAPACITORS			
C1	ECEA0JKA101	100 μ F, 6.3V	1
$\bigcirc$ C2	ECUV1H104ZFX	0.1 μ F	1
C3	ECEA1HKN010	1 μ F, 50V	1
$\bigcirc$ C4	ECUV1H104ZFX	0.1 μ F	1
C6	ECCR1H221J	220pF	1
$\bigcirc$ C7	ECUV1H104ZFX	0.1 μ F	1
$\bigcirc$ C13, 14	ECUV1H104ZFX	0.1 μ F	2
C15	ECEA0JKA470	47 μ F, 6.3V	1
$\bigcirc$ C16, 17	ECUV1H104ZFX	0.1 μ F	2
C18	ECQV1H474JZ	0.47 μ F	1
C19	EECF5R5U105	1F, 5.5V, Memory Back-up	1
$\bigcirc$ C21	ECUV1H104ZFX	0.1 μ F	1
C22, 23	ECEA0JKA470	47 μ F, 6.3V	2
C24	ECCR1H471J	470pF	1
C26	ECCF1H180JC	18pF	1
C27, 28	ECEA1CKA100	10 μ F, 16V	2
C29	ECEA1CKN100	10 μ F, 16V	1
C30, 31	ECEA1CKA100	10 μ F, 16V	2
C32	ECUV1H104ZFX	0.1 μ F	1
C33~38	ECQG1H222KZ	0.0022 μ F	6
$\bigcirc$ C39	ECUV1H104ZFX	0.1 μ F	1
C40	ECCR1H100D	10pF	1
$\bigcirc$ C41	ECUV1H104ZFX	0.1 μ F	1
C42	ECCR1H100D	10pF	1
C44	ECQG1H222KZ	0.0022 μ F	1
$\bigcirc$ C45	ECUV1H104ZFX	0.1 μ F	1
C46	ECCR1H100D	10pF	1
C48	ECQG1H222KZ	0.0022 μ F	1
$\bigcirc$ C49	ECUV1H104ZFX	0.1 μ F	1
C50	ECCR1H100D	10pF	1
C52	ECQG1H222KZ	0.0022 μ F	1
C53	ECCR1H100D	10pF	1

Ref. No.	Part No.	Description	Per/Set
C54	ECCR1H220J	22pF	1
C55	ECQG1H102KZ	0.001μF	1
C56	ECQG1H332KZ	0.0033μF	1
C57	ECCR1H681J	680pF	1
C58	ECEA1CKN100	10μF, 16V	1
C59	ECQG1H102KZ	0.001μF	1
C60	ECCR1H331J	330pF	1
C61	ECUV1H104ZFX	0.1μF	1
C62	ECCR1H220J	22pF	1
C63	ECQG1H102KZ	0.001μF	1
C64	ECQG1H332KZ	0.0033μF	1
C65	ECCR1H681J	680pF	1
C66	ECEA1CKN100	10μF, 16V	1
C67	ECQG1H102KZ	0.001μF	1
C68	ECCR1H331J	330pF	1
C69, 70	ECUV1H104ZFX	0.1μF	2
C72, 73	ECUV1H104ZFX	0.1μF	2
C74, 75	ECQG1H102KZ	0.001μF	2
C76	ECQG1H222KZ	0.0022μF	1
C77, 78	ECCR1H471J	470pF	2
C79	ECUV1H104ZFX	0.1μF	1
C80, 81	ECQG1H102KZ	0.001μF	2
C82	ECQG1H222KZ	0.0022μF	1
C83, 84	ECCR1H471J	470pF	2
C85	ECUV1H104ZFX	0.1μF	1
C86	ECEA1HKA4R7	4.7μF, 50V	1
C87	ECEA1HKA010	1μF, 50V	1
C88	ECEA1CKA470	47μF, 16V	1
C89	ECEA1EKA470	47μF, 25V	1
C90	ECUV1H104ZFX	0.1μF	1
C91	ECQG1H332KZ	0.0033μF	1
C92	ECQG1H102KZ	0.001μF	1
C93	ECEA1HKA010	1μF, 50V	1
C94	ECQG1H472KZ	0.0047μF	1
C95	ECEA1HKA010	1μF, 50V	1
C96	ECKR1E473ZV	0.047μF	1
C97	ECEA1CKA100	10μF, 16V	1
C98	ECQG1H472KZ	0.0047μF	1
C99	ECEA1HKA010	1μF, 50V	1
C100	ECUV1H104ZFX	0.1μF	1
C106, 107	ECEA1HKN010	1μF, 50V	2
C109	ECEA1EKA470	47μF, 25V	1
C126, 127	ECUV1H104ZFX	0.1μF	2
C128, 129	ECCR1H101J	100pF	2
C130	ECEA1HKA4R7	4.7μF, 50V	1
C132	ECCR1H220J	22pF	1
C133	ECUV1H104ZFX	0.1μF	1
C134~136	ECEA0JKA470	47μF, 6.3V	3
C137, 138	ECQG1H682KZ	0.0068μF	2
C139	ECUV1H104ZFX	0.1μF	1
C140	ECQG1H152KZ	0.0015μF	1
C141	ECUV1H104ZFX	0.1μF	1
C142, 143	ECCR1H331J	330pF	2
C144	ECCR1H680J	68pF	1
C145	ECUV1H104ZFX	0.1μF	1
C156, 157	ECQG1H682KZ	0.0068μF	2
C158	ECUV1H104ZFX	0.1μF	1
C159	ECQG1H152KZ	0.0015μF	1
C160	ECUV1H104ZFX	0.1μF	1
C161, 162	ECCR1H331J	330pF	2
C163	ECUV1H104ZFX	0.1μF	1
C164	ECCR1H680J	68pF	1
C165	ECUV1H104ZFX	0.1μF	1
C167	ECQB1H224JF	0.22μF	1
C168	ECUV1H104ZFX	0.1μF	1
C169	ECCR1H680J	68pF	1
C170, 171	ECCR1H331J	330pF	2
C172	ECUV1H104ZFX	0.1μF	1

Ref. No.	Part No.	Description	Per/Set
C173	ECCR1H101J	100pF	1
C174, 175	ECEA1CKA100	10μF, 16V	2
C176	ECEA1HKN4R7	4.7μF, 50V	1
C177	ECUV1H104ZFX	0.1μF	1
C178	ECEA1EKA100	10μF, 25V	1
C179	ECEA1EKA470	47μF, 25V	1
C183	ECUV1H104ZFX	0.1μF	1
C186~189	ECEA1EKA470	47μF, 25V	4
C190	ECEA0JKA331	330μF, 6.3V	1
C191~195	ECUV1H104ZFX	0.1μF	5
C196	ECQB1H103JF	0.01μF	1
C197, 198	ECCR1H680J	68pF	2
C199, 200	ECCR1H030C	3pF	2
C201	ECCR1H101J	100pF	1
C202	ECQG1H222KZ	0.0022μF	1
C203, 204	ECCR1H101J	100pF	2
C205	ECUV1H104ZFX	0.1μF	1
C207~212	ECRR1H104ZF	0.1μF	6
C220~222	ECSF1EE106	10μF, 25V	3

WIRE

Ref. No.	Part No.	Description	Per/Set
W1	QEXG01001RA	Wire	1

TCF TRANSFORMER & FUSE CIRCUIT

Ref. No.	Part No.	Description	Per/Set
LINE FILTER			
L1	△ SLTGLF3	Line Filter	1
JACK			
JK1	△ SJVD0203B	AC Inlet	1
SWITCH			
S1	EK XR XD X XS XT △ SSRG100A	Voltage Selector	1
FUSES			
F1	M XR MC XM △ XBA1C40NU100	4A, 125V	1
F1	EK XR XD X XS XT △ XBA2C12TB0	T 1.25A, 250V	1
F2, 3	△ XBA2C08TB0	T 800mA, 250V	2
F3	Others △ XBA2C08TB0	T 800mA, 250V	1
CAPACITORS			
C1	△ ECKCVA1472MF	4700pF, Line-Capacitor	1
C2	△ ECQU2A104MN	0.1μF, 250V, Across-the Line Capacitor	1

AS AMP & POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
S IC1	SVIGS4132M2M	Power Amplifier	1
IC2	SVIGM5291P	Switching Regulator	1
IC3	SVIGM5F7815	+15V Voltage Regulator	1
IC4	SVIGM5F7915	-15V Voltage Regulator	1
S IC5~7	SVIGM5218L	Operational Amplifier	3
TRANSISTORS			
S Q1	2SA1643	Transistor	1
Q2, 3	2SA1015-GR	2SA933STRS (SUB. Part)	2
Q4	2SC2320LFG	2SC1310FG (SUB. Part)	1
Q5, 7	2SC3940AR	Transistor	2
Q6, 8	2SA1534ARS	Transistor	2
DIODES			
S D1, 2	ERA1502V5	Diode	2
D3~6	SVDGS3V20	Rectifier	4
D11	SVDGRK14S	Diode	1
D12	MA2062LF	Zener, 6.2V	1
D13	EK04	Diode	1
D14, 15	MA165TA5	Diode	2
COILS			
L1	QLQGT1T121SA	Coil	1
L3	QLQGTKR68KA	Coil	1
L4, 5	QLQGT3T150SA	Coil	2
IC PROTECTOR			
○ IP1	ICP-N25T104	IC Protector	1
RESISTORS			
R1, 2	ERDS2TJ103	10kΩ	2
R4	△ ERX1ANJP4R7S	4.7Ω, 1W, Flame-Proof	1
R5	△ ERX1ANJP22S	0.22Ω, 1W, Flame-Proof	1
R8	ERDS2TJ470	47Ω	1
R9	△ ERG1ANJP221S	220Ω, 1W, Flame-Proof	1
R10	ERDS2TJ332	3.3kΩ	1
R11	ER0S2TKF1001	1kΩ, ±1%	1
R12	ERDS2TJ473	47kΩ	1
R13	ERDS2TJ124	120kΩ	1
R14	ERDS2TJ224	220kΩ	1
R15	ERDS2TJ220	22Ω	1
R16	ERDS2TJ473	47kΩ	1
R17	ERDS2TJ124	120kΩ	1
R18	ERDS2TJ224	220kΩ	1
R19	ERDS2TJ220	22Ω	1
R20	△ ERD2FCVJ4R7	4.7Ω, 1/4W, Fuse Type	1
R21, 22	ERDS2TJ473	47kΩ	2
R23	ERDS2TJ683	68kΩ	1
R24, 25	ERDS2TJ153	15kΩ	2
R26	ERDS2TJ223	22kΩ	1
R27	ERDS2TJ331	330Ω	1
R28~30	ERDS2TJ103	10kΩ	3
R31	ERDS2TJ472	4.7kΩ	1
R32	ERDS2TJ123	12kΩ	1
R33	ERDS2TJ102	1kΩ	1
R34	ERDS2TJ333	33kΩ	1
R37	ERDS2TJ222	2.2kΩ	1
R38~40	ERDS2TJ103	10kΩ	3
R41	ERDS2TJ472	4.7kΩ	1
R42	ERDS2TJ123	12kΩ	1
R43	ERDS2TJ102	1kΩ	1
R44	ERDS2TJ333	33kΩ	1

Ref. No.	Part No.	Description	Per/Set
R47, 48	ERDS2TJ222	2.2kΩ	2
R49	ERDS2TJ223	22kΩ	1
R50	△ ERD2FCVG101	100Ω, 1/4W, Fuse Type	1
R51	ERDS2TJ102	1kΩ	1
R53	ERDS2TJ393	39kΩ	1
R54	ERDS2TJ222	2.2kΩ	1
R55, 56	ERDS2TJ152	1.5kΩ	2
R57	△ ERD25FVJ4R7	4.7Ω, 1/4W, Flame-Proof	1
R58	ERDS2TJ222	2.2kΩ	1
R59	ERDS2TJ223	22kΩ	1
R60~62	ERDS2TJ102	1kΩ	3
R63	ERDS2TJ104	100kΩ	1
R64	ERDS2TJ102	1kΩ	1
R66	ERDS2TJ393	39kΩ	1
R67	ERDS2TJ222	2.2kΩ	1
R68, 69	ERDS2TJ152	1.5kΩ	2
R70	△ ERD25FVJ4R7	4.7Ω, 1/4W, Flame-Proof	1
R71	ERDS2TJ103	10kΩ	1
R72	ERDS2TJ154	150kΩ	1
R73, 74	△ ERD2FCVJ4R7	4.7Ω, 1/4W, Fuse Type	2
R77	△ ERF5ZXJ100	10Ω, 5W, Flame-Proof	1
R78	ERDS2TJ331	330Ω	1
R79	ERDS2TJ101	100Ω	1
R80	ERDS2TJ471	470Ω	1
CAPACITORS			
C1	△ ECQE1A104M6	0.1μF, 125V	1
C2	ECEA1VKG100	10μF, 35V	1
C3	ECCR1H101J	100pF	1
C4	ECEA0JU102	1000μF, 6.3V	1
C6	ECKR1E473ZV	0.047μF	1
C7	ECEA1VU332	3300μF, 35V	1
C9	ECEA1VKG100	10μF, 35V	1
C10	ECEA1VU222	2200μF, 35V	1
C12	ECEA1VKG100	10μF, 35V	1
C13, 14	ECCR1H220J	22pF	2
C15, 16	ECKR1E473ZV	0.047μF	2
C17	ECEA1EKA470	47μF, 25V	1
C18	ECQB1H333JF	0.033μF	1
C19	ECEA1CKN100	10μF, 16V	1
C20, 21	ECQB1H103JF	0.01μF	2
C22	ECQB1H683JF	0.068μF	1
C23	ECQB1H682JF	0.0068μF	1
○ C24	ECQB1H224JF	0.22μF	1
C25	ECQB1H683JF	0.068μF	1
C26, 27	ECQB1H103JF	0.01μF	2
C28	ECQB1H683JF	0.068μF	1
C29	ECQB1H682JF	0.0068μF	1
○ C32	ECQB1H224JF	0.22μF	1
C33	ECQB1H683JF	0.068μF	1
C36	ECEA1EKA100	10μF, 25V	1
C37	ECKR1E473ZV	0.047μF	1
C38	ECCR1H331J	330pF	1
C39	ECEA1HU330	33μF, 50V	1
C40	ECEA1EKA4R7	4.7μF, 25V	1
C42	ECEA1EKA470	47μF, 25V	1
C43	ECRR1H104ZF	0.1μF	1
C44	ECQB1H333JF	0.033μF	1
C45	ECCR1H331J	330pF	1
C46	ECEA1VKG100	10μF, 35V	1
C47	ECEA1EKA4R7	4.7μF, 25V	1
C49	ECEA1EKA470	47μF, 25V	1
C50	ECRR1H104ZF	0.1μF	1
C51	ECEA50Y15	15μF, 50V	1
C52	ECEA50Y3R3	3.3μF, 50V	1
C53	ECEA50Y15	15μF, 50V	1
C54	ECEA50Y3R3	3.3μF, 50V	1

Ref. No.	Part No.	Description	Per/Set
C55	ECEA50Y4R7	4.7μF, 50V	1
C57	ECQB1H333JF	0.033μF	1
C59	ECEA1EKA330	33μF, 25V	1
C60, 61	ECRR1H104ZF	0.1μF	2
CONNECTORS			
○ CN2	QJTG01012AA	Connector	1
○ CN6	QJTG01005AA	Connector	1
WIRE			
W1	QEXG01001RA	Wire	1

PC PEAK CANCELLER CIRCUIT

Ref. No.	Part No.	Description	Per/Set
COIL			
L1	QLCGTKR68KA	Coil	1
RESISTOR			
R1	△ ERF5ZXJ100	10Ω, 5W, Flame-Proof	1
CAPACITOR			
C1	ECEA50Y4R7	4.7μF, 50V	1

HP HEADPHONES CIRCUIT

Ref. No.	Part No.	Description	Per/Set
COIL			
L1	QLQGT3T150SA	Coil	1
JACKS			
JK1, 2	SJJG100A	Headphones 1, 2	2
RESISTORS			
R1~4	△ ERG1ANJP680S	68Ω, 1W, Flame-Proof	4
CAPACITORS			
C1, 2	ECKR1E473ZV	0.047μF	2

CPL CONTROL PANEL LEFT CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
IC1	SVIGM603A121	Gate Array	1
IC2, 4, 5	SVIGM74LS07	Hex Buffers (O.C.)	3

Ref. No.	Part No.	Description	Per/Set
TRANSISTORS			
Q1~4	2SA830SB	Transistor	4
DIODES			
D1~12, 16	MA165TA5	Diode	13
D101~121	LN282R	LED (Red)	21
COMPONENT COMBINATION			
Z1	EXBPI8103JM	10kΩ × 8	1
SWITCHES			
S1~12	QSPG1005AA	Push Switch	12
IC PROTECTOR			
IP1	△ ICP-N10T104	IC Protector	1
VARIABLE RESISTOR			
VR1	EVD06510B24G	20kΩ B, Main Volume	1
RESISTORS			
R1	ERDS2TJ184	180kΩ	1
R2	ERDS2TJ221	220Ω	1
R3	ERDS2TJ152	1.5kΩ	1
R4	ERDS2TJ102	1kΩ	1
R5~9	ERDS2TJ103	10kΩ	5
R10~15	ERDS2TJ680	68Ω	6
R18~29	ERDS2TJ680	68Ω	12
CAPACITORS			
C1	ECEA0JKA470	47μF, 6.3V	1
C2	ECCR1H101J	100pF	1
C4	ECEA1HKA010	1μF, 50V	1
C5, 6	ECCR1H101J	100pF	2
C7	ECRR1H104ZF	0.1μF	1
C9, 10	ECRR1H104ZF	0.1μF	2
C11	ECKR1E473ZV	0.047μF	1

CPR CONTROL PANEL RIGHT CIRCUIT

Ref. No.	Part No.	Description	Per/Set
DIODES			
D1~9	MA165TA5	Diode	9
D101~111, 113~116, 123	LN282R	LED (Red)	16
D112	LN382G	LED (Green)	1
DISPLAY			
LD1	LB603VF	Triple 8 Segments Display	1
SWITCHES			
S1~9	QSPG1005AA	Push Switch	9

MKB1 MANUAL KEYBOARD 1 CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
○ IC1	MSM7U042016	Gate Array	1
○ IC2	BR93CS46	1k bit Programmed EEPROM	1
DIODES			
S D1~88	MA162A	MA150IR (SUB. Part)	88
OSCILLATOR			
X1	SVQGA20MX040	20MHz, Ceramic Oscillator	1
RESISTORS			
R1	ERDS2TJ101	100Ω	1
R2, 3	ERDS2TJ472	4.7kΩ	2
CAPACITORS			
C1	ECEA0JU470	47μF, 6.3V	1
C2	ECCW1H471J5	470pF	1
C3, 4	ECCW1H220J5	22pF	2
C5	ECKR1E473ZV	0.047μF	1
C6, 7	ECCW1H101J5	100pF	2

MKB2 MANUAL KEYBOARD 2 CIRCUIT

Ref. No.	Part No.	Description	Per/Set
DIODES			
S D1~88	MA162A	MA150IR (SUB. Part)	88
COMPONENT COMBINATION			
Z1	EXBP88332JM	3.3kΩ × 8	1

JACK JACK CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUIT			
IC1	SVIGTLP513	Photo Coupler	1
TRANSISTORS			
S Q1~3	2SA1015-GR	2SA933STRS (SUB. Part)	3
DIODES			
D1~7	MA165TA5	Diode	7
COILS			
L1~5	QLQGT3T150SA	Coil	5
JACKS			
JK1	QJSG002AA	PEDAL IN	1
JK2~4	SJSG1370A	MIDI THRU, OUT, IN	3
JK5~8	QJJG003AA	LINE OUT, AUX IN	4

Ref. No.	Part No.	Description	Per/Set
VARIABLE RESISTORS			
VR1	EVJ01PF25B55	500kΩ B, Tune	1
RESISTORS			
R1, 2	ERDS2TJ103	10kΩ	2
R3	ERDS2TJ471	470Ω	1
R4	ERDS2TJ104	100kΩ	1
R5~8	ERDS2TJ103	10kΩ	4
R8, 9	ERDS2TJ101	100Ω	2
R10	ERDS2TJ221	220Ω	1
R11	ERDS2TJ104	100kΩ	1
R12, 13	ERDS2TJ101	100Ω	2
R14	ERDS2TJ221	220Ω	1
R15	ERDS2TJ104	100kΩ	1
R16	ERDS2TJ221	220Ω	1
R17~18	ERDS2TJ102	1kΩ	2
R19, 20	ER0S2TKF1001	1kΩ, ±1%	2
R21, 22	ERDS2TJ152	1.5kΩ	2
R23, 24	ERDS2TJ102	1kΩ	2
CAPACITORS			
C1	ECRR1H104ZF	0.1μF	1
C2~4	ECKR1E473ZV	0.047μF	3
C5, 6	ECCR1H221J	220pF	2
C7	ECKR1E473ZV	0.047μF	1
C8	ECEA0JKA470	47μF, 6.3V	1
C9, 10	ECRR1H104ZF	0.1μF	2
C13	ECRR1H104ZF	0.1μF	1
C16	ECRR1H104ZF	0.1μF	1
C18~21	ECBA1H222KB	0.0022μF	4
CONNECTORS			
○ CN1	QJTG01010AA	Connector	1
○ CN2	QJTG01005AA	Connector	1
WIRES			
W1, 2	QEXG01001RA	Wire	2

WIRING PARTS

Ref. No.	Part No.	Description	Per/Set
○ W1	QEXGSS16045A	Connector with Wire	1
○ W2	QEXGSS14015A	Connector with Wire	1
○ W3	QEXGSS06090A	Connector with Wire	1
○ W4	QEXGVH05050B	Connector with Wire	1
○ W5	QEXGVH04085C	Connector with Wire	1
○ W6	QEXGVH06015B	Connector with Wire	1
○ W7	QEXGVH03120B	Connector with Wire	1
○ W8, 9	QEXGSS12010A	Connector with Wire	2
○ W10	QEXGEL06020A	Connector with Wire	1
○ W11	QEXGEL06070A	Connector with Wire	1

CABINET PARTS LOCATION

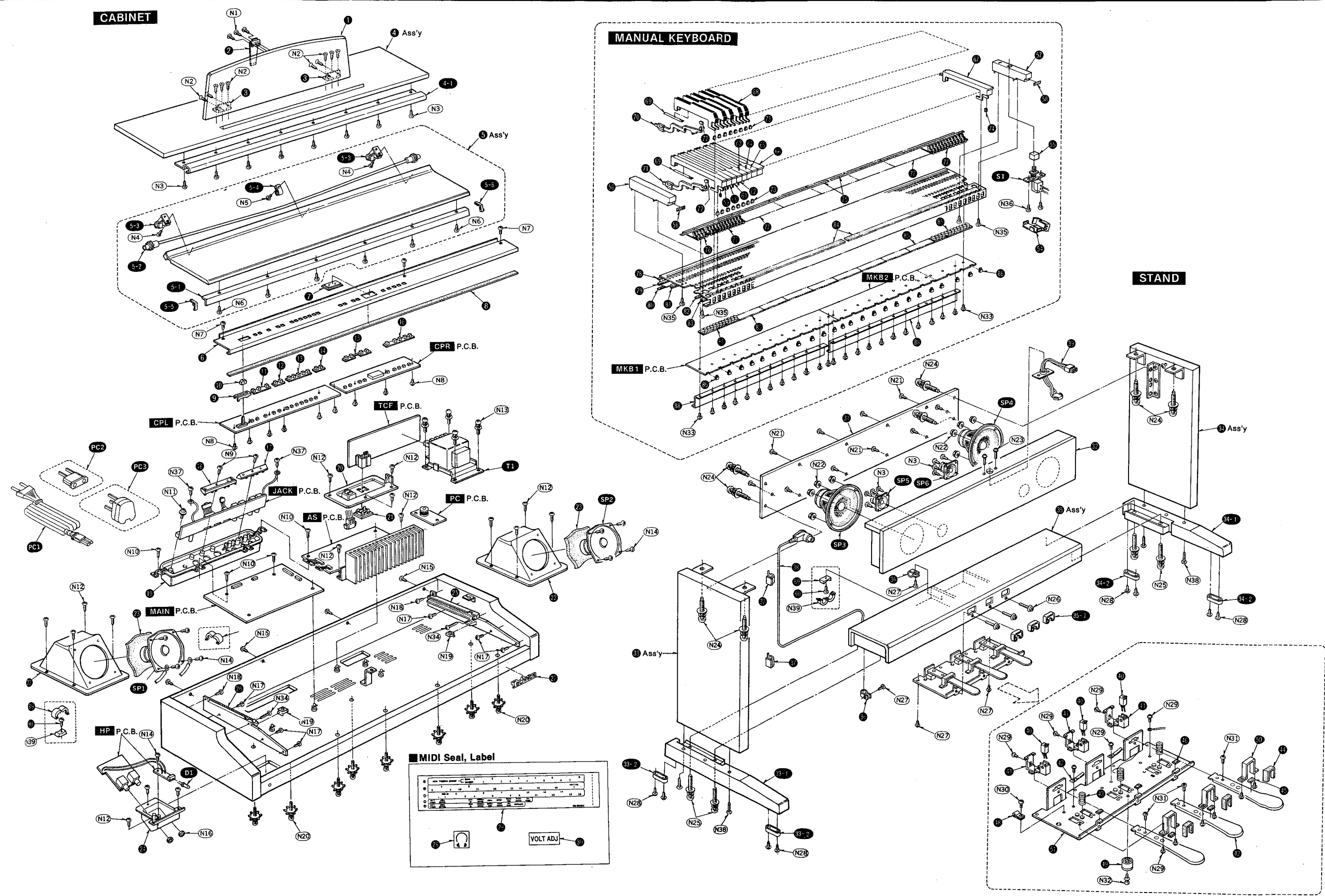
1 2 3 4 5 6 7 8 9 10

A
B
C
D
E
F

CABINET

MANUAL KEYBOARD

STAND



Ref. No.	Part No.	Description	Per/Set
C55	ECEA50Y4R7	4.7μF, 50V	1
C57	ECQB1H333JF	0.033μF	1
C59	ECEA1EKA330	33μF, 25V	1
C60, 61	ECRR1H104ZF	0.1μF	2
CONNECTORS			
○ CN2	QJTG01012AA	Connector	1
○ CN6	QJTG01005AA	Connector	1
WIRE			
W1	QEXG01001RA	Wire	1

PC PEAK CANCELLER CIRCUIT

Ref. No.	Part No.	Description	Per/Set
COIL			
L1	QLCGTKR68KA	Coil	1
RESISTOR			
R1	△ ERF5ZXJ100	10Ω, 5W, Flame-Proof	1
CAPACITOR			
C1	ECEA50Y4R7	4.7μF, 50V	1

HP HEADPHONES CIRCUIT

Ref. No.	Part No.	Description	Per/Set
COIL			
L1	QLQGT3T150SA	Coil	1
JACKS			
JK1, 2	SJJG100A	Headphones 1, 2	2
RESISTORS			
R1~4	△ ERG1ANJP680S	68Ω, 1W, Flame-Proof	4
CAPACITORS			
C1, 2	ECKR1E473ZV	0.047μF	2

CPL CONTROL PANEL LEFT CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
IC1	SVIGM603A121	Gate Array	1
IC2, 4, 5	SVIGM74LS07	Hex Buffers (O.C.)	3

Ref. No.	Part No.	Description	Per/Set
TRANSISTORS			
Q1~4	2SA830SB	Transistor	4
DIODES			
D1~12, 16	MA165TA5	Diode	13
D101~121	LN282R	LED (Red)	21
COMPONENT COMBINATION			
Z1	EXBPI8103JM	10kΩ × 8	1
SWITCHES			
S1~12	QSPG1005AA	Push Switch	12
IC PROTECTOR			
IP1	△ ICP-N10T104	IC Protector	1
VARIABLE RESISTOR			
VR1	EVD06510B24G	20kΩ B, Main Volume	1
RESISTORS			
R1	ERDS2TJ184	180kΩ	1
R2	ERDS2TJ221	220Ω	1
R3	ERDS2TJ152	1.5kΩ	1
R4	ERDS2TJ102	1kΩ	1
R5~9	ERDS2TJ103	10kΩ	5
R10~15	ERDS2TJ680	68Ω	6
R18~29	ERDS2TJ680	68Ω	12
CAPACITORS			
C1	ECEA0JKA470	47μF, 6.3V	1
C2	ECCR1H101J	100pF	1
C4	ECEA1HKA010	1μF, 50V	1
C5, 6	ECCR1H101J	100pF	2
C7	ECRR1H104ZF	0.1μF	1
C9, 10	ECRR1H104ZF	0.1μF	2
C11	ECKR1E473ZV	0.047μF	1

CPR CONTROL PANEL RIGHT CIRCUIT

Ref. No.	Part No.	Description	Per/Set
DIODES			
D1~9	MA165TA5	Diode	9
D101~111, 113~116, 123	LN282R	LED (Red)	16
D112	LN382G	LED (Green)	1
DISPLAY			
LD1	LB603VF	Triple 8 Segments Display	1
SWITCHES			
S1~9	QSPG1005AA	Push Switch	9

III-5

MKB1 MANUAL KEYBOARD 1 CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUITS			
○ IC1	MSM7U042016	Gate Array	1
○ IC2	BR93CS46	1k bit Programmed EEPROM	1
DIODES			
S D1~88	MA162A	MA150IR (SUB. Part)	88
OSCILLATOR			
X1	SVQGA20MX040	20MHz, Ceramic Oscillator	1
RESISTORS			
R1	ERDS2TJ101	100Ω	1
R2, 3	ERDS2TJ472	4.7kΩ	2
CAPACITORS			
C1	ECEA0JU470	47μF, 6.3V	1
C2	ECCW1H471J5	470pF	1
C3, 4	ECCW1H220J5	22pF	2
C5	ECKR1E473ZV	0.047μF	1
C6, 7	ECCW1H101J5	100pF	2

MKB2 MANUAL KEYBOARD 2 CIRCUIT

Ref. No.	Part No.	Description	Per/Set
DIODES			
S D1~88	MA162A	MA150IR (SUB. Part)	88
COMPONENT COMBINATION			
Z1	EXBP88332JM	3.3kΩ × 8	1

JACK JACK CIRCUIT

Ref. No.	Part No.	Description	Per/Set
INTEGRATED CIRCUIT			
IC1	SVIGTLP513	Photo Coupler	1
TRANSISTORS			
S Q1~3	2SA1015-GR	2SA933STRS (SUB. Part)	3
DIODES			
D1~7	MA165TA5	Diode	7
COILS			
L1~5	QLQGT3T150SA	Coil	5
JACKS			
JK1	QJSG002AA	PEDAL IN	1
JK2~4	SJSG1370A	MIDI THRU, OUT, IN	3
JK5~8	QJG003AA	LINE OUT, AUX IN	4

III-6

Ref. No.	Part No.	Description	Per/Set
VARIABLE RESISTORS			
VR1	EVJ01PF25B55	500kΩ B, Tune	1
RESISTORS			
R1, 2	ERDS2TJ103	10kΩ	2
R3	ERDS2TJ471	470Ω	1
R4	ERDS2TJ104	100kΩ	1
R5~8	ERDS2TJ103	10kΩ	4
R8, 9	ERDS2TJ101	100Ω	2
R10	ERDS2TJ221	220Ω	1
R11	ERDS2TJ104	100kΩ	1
R12, 13	ERDS2TJ101	100Ω	2
R14	ERDS2TJ221	220Ω	1
R15	ERDS2TJ104	100kΩ	1
R16	ERDS2TJ221	220Ω	1
R17~18	ERDS2TJ102	1kΩ	2
R19, 20	ERDS2TKF1001	1kΩ, ±1%	2
R21, 22	ERDS2TJ152	1.5kΩ	2
R23, 24	ERDS2TJ102	1kΩ	2
CAPACITORS			
C1	ECRR1H104ZF	0.1μF	1
C2~4	ECKR1E473ZV	0.047μF	3
C5, 6	ECCR1H221J	220pF	2
C7	ECKR1E473ZV	0.047μF	1
C8	ECEA0JKA470	47μF, 6.3V	1
C9, 10	ECRR1H104ZF	0.1μF	2
C13	ECRR1H104ZF	0.1μF	1
C16	ECRR1H104ZF	0.1μF	1
C18~21	ECBA1H222KB	0.0022μF	4
CONNECTORS			
○ CN1	QJTG01010AA	Connector	1
○ CN2	QJTG01005AA	Connector	1
WIRES			
W1, 2	QEXG01001RA	Wire	2

WIRING PARTS

Ref. No.	Part No.	Description	Per/Set
○ W1	QEXGSS16045A	Connector with Wire	1
○ W2	QEXGSS14015A	Connector with Wire	1
○ W3	QEXGSS06090A	Connector with Wire	1
○ W4	QEXGVH05050B	Connector with Wire	1
○ W5	QEXGVH04085C	Connector with Wire	1
○ W6	QEXGVH06015B	Connector with Wire	1
○ W7	QEXGVH03120B	Connector with Wire	1
○ W8, 9	QEXGSS12010A	Connector with Wire	2
○ W10	QEXGEL06020A	Connector with Wire	1
○ W11	QEXGEL06070A	Connector with Wire	1

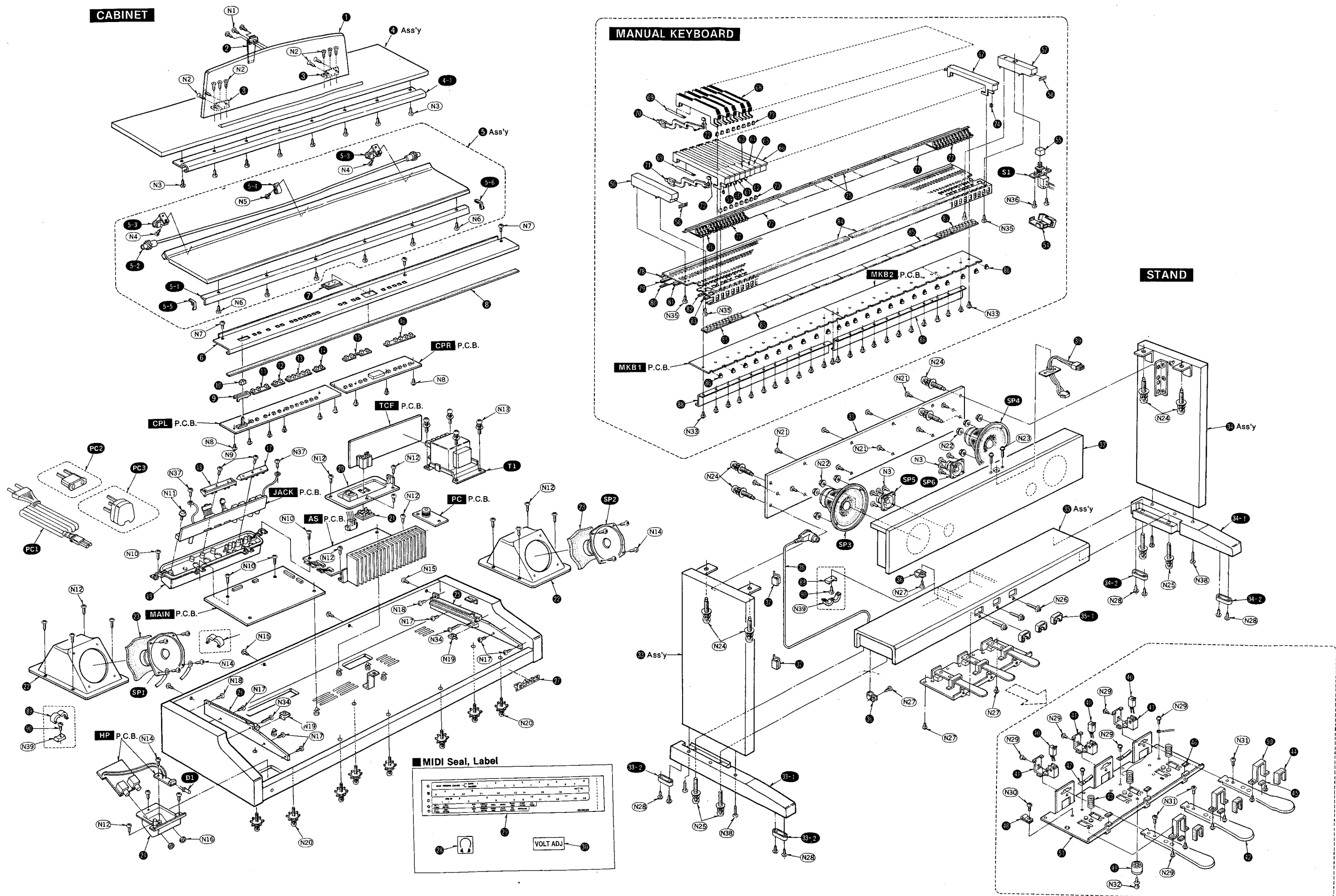
CABINET PARTS LOCATION

1 2 3 4 5 6 7 8 9 10

CABINET

MANUAL KEYBOARD

STAND



REPLACEMENT PARTS LIST Cabinet and Chassis Parts

Notes:

- Important safety notice
Components identified by Δ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- $\bigcirc$ mark are new parts.
- For part No. with area mark, check the area when placing an order.

- Keyboard chassis part No. with mark (NLA) is no longer available after production discontinuation of the complete set.

Cabinet colour

- SX-PX73 Black
- SX-PX73M Walnut

SX-PX73 CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	Per/Set
SWITCH			
S1 Δ	ESB823V	Power Switch	1
DIODE			
$\bigcirc$ D1	SEL4214RLC05	LED, Power Indicator	1
SPEAKERS			
$\bigcirc$ SP1, 2	QASG12P03A	12cm, 3 Ω	2
$\bigcirc$ SP3, 4	EAS16PL470A3	16cm, 8 Ω	2
$\bigcirc$ SP5, 6	EAS65PH31A3	6.5cm, 8 Ω	2
TRANSFORMERS			
$\bigcirc$ T1 $\begin{matrix} M & MC & \Delta \\ & XM & \end{matrix}$	QTPG1M015A	Power Transformer	1
$\bigcirc$ T1 $\begin{matrix} EK & X & \Delta \\ XR & XS & \\ XT & XD & \end{matrix}$	QTPG1M018A	Power Transformer	1
$\bigcirc$ T1 Others Δ	QTPG1M017A	Power Transformer	1
POWER CORD & PLUG			
PC1 $\begin{matrix} XL & XR & \Delta \\ M & MC & \Delta \\ & XM & \end{matrix}$	SJAG61	AC Power Cord	1
PC1 $\begin{matrix} M & MC & \Delta \\ & XM & \end{matrix}$	SJAG62	AC Power Cord	1
PC1 $\begin{matrix} EK & XS & \Delta \\ & XD & \end{matrix}$	QJAG001AA	AC Power Cord	1
PC1 Others Δ	SJAG65	AC Power Cord	1
PC2 $\begin{matrix} X & \Delta \\ & XD & \end{matrix}$	SJP5213-1	Attachment Plug	1
PC3 $\begin{matrix} XD & \Delta \end{matrix}$	SJPG1350A	Power Plug	1
CABINET PARTS			
$\bigcirc$ 1	QGAG1014AA	Music Rack	1
$\bigcirc$ 2	SBLG7-2	Stay	1
$\bigcirc$ 3	SBHG5003-2	Hinge	2
$\bigcirc$ 4	BKQGA047AA	Top Cover Ass'y	1
$\bigcirc$ 4-1	[QGKG0045AB	Ornament	1
$\bigcirc$ 5	QKQGF007AA	Keyboard Cover Ass'y	1
$\bigcirc$ 5-1	[QGKG0075AA	Ornament	1
$\bigcirc$ 5-2	QXQG007AA	Axletree	1
$\bigcirc$ 5-3	QMRG7026AA	Holder	2
$\bigcirc$ 5-4	QWBG002AA	Holder	1
$\bigcirc$ 5-5	QMRG7031AA	Protector	1
$\bigcirc$ 5-6	QMRG7032AA	Protector	1
$\bigcirc$ 6	QGPG0040BA	Control Panel	1
$\bigcirc$ 7	QGPG0043AA	LED Panel	1
$\bigcirc$ 8	QMFG1035AA	Felt (Red)	1
$\bigcirc$ 9	SGEG260A	Ornament for Sliding Volume	1
$\bigcirc$ 10	SBNG7050A	Knob	1
$\bigcirc$ 11	QGUG1138AA	Button	1
$\bigcirc$ 12	QGUG1139AA	Button	1
$\bigcirc$ 13	QGUG1140AA	Button	1
$\bigcirc$ 14	QGUG1140BA	Button	1
$\bigcirc$ 15	QGUG1141AA	Button	1
$\bigcirc$ 16	QGUG1142AA	Button	1

SX-PX73M CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	Per/Set
SWITCH			
S1 Δ	ESB823V	Power Switch	1
DIODE			
$\bigcirc$ D1	SEL4214RLC05	LED, Power Indicator	1
SPEAKERS			
$\bigcirc$ SP1, 2	QASG12P03A	12cm, 3 Ω	2
$\bigcirc$ SP3, 4	EAS16PL470A3	16cm, 8 Ω	2
$\bigcirc$ SP5, 6	EAS65PH31A3	6.5cm, 8 Ω	2
TRANSFORMERS			
$\bigcirc$ T1 $\begin{matrix} M & MC & \Delta \\ & XM & \end{matrix}$	QTPG1M015A	Power Transformer	1
$\bigcirc$ T1 $\begin{matrix} EK & X & \Delta \\ XR & XS & \\ XT & XD & \end{matrix}$	QTPG1M018A	Power Transformer	1
$\bigcirc$ T1 Others Δ	QTPG1M017A	Power Transformer	1
POWER CORD & PLUG			
PC1 $\begin{matrix} XL & XR & \Delta \\ M & MC & \Delta \\ & XM & \end{matrix}$	SJAG61	AC Power Cord	1
PC1 $\begin{matrix} M & MC & \Delta \\ & XM & \end{matrix}$	SJAG62	AC Power Cord	1
PC1 $\begin{matrix} EK & XS & \Delta \\ & XD & \end{matrix}$	QJAG001AA	AC Power Cord	1
PC1 Others Δ	SJAG65	AC Power Cord	1
PC2 $\begin{matrix} X & \Delta \\ & XD & \end{matrix}$	SJP5213-1	Attachment Plug	1
PC3 $\begin{matrix} XD & \Delta \end{matrix}$	SJPG1350A	Power Plug	1
CABINET PARTS			
$\bigcirc$ 1	QGAG1014AB	Music Rack	1
$\bigcirc$ 2	SBLG7	Stay	1
$\bigcirc$ 3	SBHG5003	Hinge	2
$\bigcirc$ 4	BKQGA047AB	Top Cover Ass'y	1
$\bigcirc$ 4-1	[QGKG0045AA	Ornament	1
$\bigcirc$ 5	QKQGF007AB	Keyboard Cover Ass'y	1
$\bigcirc$ 5-1	[QGKG0075AB	Ornament	1
$\bigcirc$ 5-2	QXQG007AA	Axletree	1
$\bigcirc$ 5-3	QMRG7026AA	Holder	2
$\bigcirc$ 5-4	QWBG002AA	Holder	1
$\bigcirc$ 5-5	QMRG7031AB	Protector	1
$\bigcirc$ 5-6	QMRG7032AB	Protector	1
$\bigcirc$ 6	QGPG0040BA	Control Panel	1
$\bigcirc$ 7	QGPG0043AA	LED Panel	1
$\bigcirc$ 8	QMFG1035AA	Felt (Red)	1
$\bigcirc$ 9	SGEG260A	Ornament for Sliding Volume	1
$\bigcirc$ 10	SBNG7050A	Knob	1
$\bigcirc$ 11	QGUG1138AA	Button	1
$\bigcirc$ 12	QGUG1139AA	Button	1
$\bigcirc$ 13	QGUG1140AA	Button	1
$\bigcirc$ 14	QGUG1140BA	Button	1
$\bigcirc$ 15	QGUG1141AA	Button	1
$\bigcirc$ 16	QGUG1142AA	Button	1

SX-PX73
SX-PX73M

Ref. No.	Part No.	Description	Per/Set	Ref. No.	Part No.	Description	Per/Set
○ 17	QMRG7028AB	Bracket	1	○ 17	QMRG7028AB	Bracket	1
○ 18	QMRG7029AB	Bracket	1	○ 18	QMRG7029AB	Bracket	1
○ 19	QGKG0076AB	External Jack Case	1	○ 19	QGKG0076AB	External Jack Case	1
○ 20	EK X XR XS XT XD Others	QKKG0079AA AC Jack Panel	1	○ 20	EK X XR XS XT XD Others	QKKG0079AA AC Jack Panel	1
○ 20	QKKG0079BA	AC Jack Panel	1	○ 20	QKKG0079BA	AC Jack Panel	1
21	XL XR △ Others △	SJS9334A AC Inlet Cover	1	21	XL XR △ Others △	SJS9334A AC Inlet Cover	1
○ 21	SJS9231A	AC Inlet Cover	1	○ 21	SJS9231A	AC Inlet Cover	1
○ 22	QMRG7033AA	Speaker Box	2	○ 22	QMRG7033AA	Speaker Box	2
○ 23	SHSG9160A	Sound Absorbing Material	2	○ 23	SHSG9160A	Sound Absorbing Material	2
○ 24	QGKG0080AA	Headphone Jack Case	1	○ 24	QGKG0080AA	Headphone Jack Case	1
○ 25	QKSGG007AA	Keyboard Cover Guide, Right	1	○ 25	QKSGG007AA	Keyboard Cover Guide, Right	1
○ 26	QKSGG006AA	Keyboard Cover Guide, Left	1	○ 26	QKSGG006AA	Keyboard Cover Guide, Left	1
○ 27	SGBG160B	Badge	1	○ 27	SGBG160B	Badge	1
○ 28	SGKG3040B	Label (Headphone)	1	○ 28	SGKG3040B	Label (Headphone)	1
○ 29	QQLG045AA	MIDI Seal	1	○ 29	QQLG045AA	MIDI Seal	1
○ 30	QQLG044AA	Label (VOLT ADJ)	1	○ 30	QQLG044AB	Label (VOLT ADJ)	1
STAND				STAND			
○ 31	QKUG1019AAK	Rear Board	1	○ 31	QKUG1019ABK	Rear Board	1
○ 32	QKQGL020AAK	Speaker Box	1	○ 32	QKQGL020ABK	Speaker Box	1
○ 33	QKQGB160AA	Left Plank Ass'y	1	○ 33	QKQGB160AB	Left Plank Ass'y	1
○ 33-1	QKSGB006AA	Leg, Left	1	○ 33-1	QKSGB006AB	Leg, Left	1
○ 33-2	SHRG2130B	Foot	1	○ 33-2	SHRG2130B	Foot	2
○ 34	QKQGB161AA	Right Plank Ass'y	1	○ 34	QKQGB161AB	Right Plank Ass'y	1
○ 34-1	QKSGB007AA	Leg, Right	1	○ 34-1	QKSGB007AB	Leg, Right	1
○ 34-2	SHRG2130B	Foot	1	○ 34-2	SHRG2130B	Foot	2
○ 35	QKQGM029AA	Pedal Box Ass'y	1	○ 35	QKQGM029AB	Pedal Box Ass'y	1
○ 35-1	QKKG0036AAK	Ornament	3	○ 35-1	QKKG0036AAK	Ornament	3
○ 36	SHRG1230A	Cord Clamper	2	○ 36	SHRG1230A	Cord Clamper	2
○ 37	SHRG9620A	Cord Clamper	3	○ 37	SHRG9620A	Cord Clamper	3
○ 38	QJLG002AB	Pedal Cord	1	○ 38	QJLG002AB	Pedal Cord	1
○ 39	QEXGEL06020A	Connector with Wire	1	○ 39	QEXGEL06020A	Connector with Wire	1
○ 40	SRDSMLS-2	Switch	3	○ 40	SRDSMLS-2	Switch	3
○ 41	QMWG8005AB	Switch Cover	3	○ 41	QMWG8005AB	Switch Cover	3
○ 42	STBG3119A	Pedal Arm	3	○ 42	STBG3119A	Pedal Arm	3
○ 43	SUSG441A	Spring	3	○ 43	SUSG441A	Spring	3
○ 44	SHSG2750A	Felt	3	○ 44	SHSG2750A	Felt	3
○ 45	SHSG2770A	Felt	3	○ 45	SHSG2770A	Felt	3
○ 46	SHSG2790A	Felt	3	○ 46	SHSG2790A	Felt	3
○ 47	SUWG219	Binder	2	○ 47	SUWG219	Binder	2
○ 48	SHRG1130A	Cord Clamper	1	○ 48	SHRG1130A	Cord Clamper	1
○ 49	SKLG160A	Foot	1	○ 49	SKLG160A	Foot	1
○ 50	STBG4090A	Arm Guide	3	○ 50	STBG4090A	Arm Guide	3
○ 51	QMKG001AA	Pedal Chassis	1	○ 51	QMKG001AA	Pedal Chassis	1
MANUAL KEYBOARD				MANUAL KEYBOARD			
○ 54	SHRG8390A	Cover, Power SW.	1	○ 54	SHRG8390A	Cover, Power SW.	1
○ 55	QGUG1040AA	Button, Power Switch	1	○ 55	QGUG1040AA	Button, Power Switch	1
○ 56	QPGG0042AB	End Cover Panel, Left	1	○ 56	QPGG0042AB	End Cover Panel, Left	1
○ 57	QPGG0041AB	End Cover Panel, Right	1	○ 57	QPGG0041AB	End Cover Panel, Right	1
○ 58	SHSG3690A	Felt	2	○ 58	SHSG3690A	Felt	2
○ 59	STBGA1050A	White Key (First Octave A Key)	1	○ 59	STBGA1050A	White Key (First Octave A Key)	1
○ 60	STBGA1060A	White Key (B Key)	8	○ 60	STBGA1060A	White Key (B Key)	8
○ 61	STBGA1070A	White Key (C Key)	7	○ 61	STBGA1070A	White Key (C Key)	7
○ 62	STBGA1080A	White Key (D Key)	7	○ 62	STBGA1080A	White Key (D Key)	7
○ 63	STBGA1090A	White Key (E Key)	7	○ 63	STBGA1090A	White Key (E Key)	7
○ 64	STBGA1100A	White Key (F Key)	7	○ 64	STBGA1100A	White Key (F Key)	7
○ 65	STBGA1110A	White Key (G Key)	7	○ 65	STBGA1110A	White Key (G Key)	7
○ 66	STBGA1120A	White Key (A Key)	7	○ 66	STBGA1120A	White Key (A Key)	7
○ 67	STBGA1130A	White Key (Top Octave C Key)	1	○ 67	STBGA1130A	White Key (Top Octave C Key)	1
○ 68	STBG2920A	Black Key	36	○ 68	STBG2920A	Black Key	36
○ 69	SUSG533A	Spring	88	○ 69	SUSG533A	Spring	88
○ 70	QMWG8014AA	Hammer (Black Key)	36	○ 70	QMWG8014AA	Hammer (Black Key)	36

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Ref. No.	Part No.	Description	Per/Set
71	QMWG8013AA	Hammer (White Key)	52
72	SHGG9121A	Rubber Cap (Hammer)	88
73	SHRG9900B	Key Guide Rubber	88
74	SHSG5910A	Felt	52
75	QMFG4067AA	Felt	2
76	QMWG8004BA	Fulcrum (4pcs. on one)	1
77	QMWG8003BA	Fulcrum (12pcs. on one)	7
78	SHRGA9080A	Sponge	2
79	QMFG1073AA	Felt	2
80	SHSG3461A	Felt	1
81	QMFG1074CA	Felt	2
82	QMFG1061AA	Felt	2
83	QMFG1060AA	Felt	2
84	SHSG3451A	Felt	2
85	QMWG6006AA	Rubber Switch (8pcs. on one)	2
86	SHRG9751A	P.C.B. Holder	11
87	STBG6216A	Chassis	24
88	SUWG3152A	Angle	2

Core (M, MC, EZ, XL, XM only)

89	QLZG003A	Core	3
90	SHRG1270A	Mounting Base	2

SCREWS & WASHERS

N1	XTB3+10AFZ	Screw	3
N2	XTS3+10AFZ	Screw	10
N3	XTT4+10A	Screw	15
N4	XTB4+10B	Screw	2
N5	XTT4+12AFZ	Screw	1
N6	XTS35+10A	Screw	6
N7	XTT4+10AFZ	Screw	3
N8	XTV3+8J	Screw	9
N9	XTW3+10Q	Screw	2
N10	XTT4+20A	Screw	4
N11	XTWSG2	Screw with Washer	1
N12	XTB35+12A	Screw	16
N13	XYN4+F16	Screw with Washer	4
N14	XTW3+10Q	Screw	9
N15	XTT4+30AFZ	Screw	4
N16	XNS12FZ	Nut	2
N17	XTB35+12AFZ	Screw	6
N18	XTB35+16A	Screw	2
N19	QHWG007AA	Nut	2
N20	QHDG019AA	Screw with Washer	8
N21	XTT4+25AFZ	Screw	10
N22	SNE499-1	Nut	8
N23	QHDG004AA	Screw	2
N24	QHDG016AB	Screw with Washer	8
N25	XYN6+F40	Screw with Washer	4
N26	XYN4+F16FZ	Screw with Washer	3
N27	XTB35+14A	Screw	4
N28	XTB4+16A	Screw	8
N29	XTW3+8C	Screw	12
N30	XTB3+6C	Screw	1
N31	XSN4+6	Screw	3
N32	XYN4+C25	Screw with Washer	1
N33	XTW3+10T	Screw	24
N34	XTN4+50AFZ	Washer	2
N35	XTB4+12A	Screw	4
N36	XTV3+10C	Screw	2
N37	SNEG2660A	Screw	2
N38	XTT4+30A	Screw	4
N39	XTB3+12A	Screw	2

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Ref. No.	Part No.	Description	Per/Set
71	QMWG8013AA	Hammer (White Key)	52
72	SHGG9121A	Rubber Cap (Hammer)	88
73	SHRG9900B	Key Guide Rubber	88
74	SHSG5910A	Felt	52
75	QMFG4067AA	Felt	2
76	QMWG8004BA	Fulcrum (4pcs. on one)	1
77	QMWG8003BA	Fulcrum (12pcs. on one)	7
78	SHRGA9080A	Sponge	2
79	QMFG1073AA	Felt	2
80	SHSG3461A	Felt	1
81	QMFG1074CA	Felt	2
82	QMFG1061AA	Felt	2
83	QMFG1060AA	Felt	2
84	SHSG3451A	Felt	2
85	QMWG6006AA	Rubber Switch (8pcs. on one)	2
86	SHRG9751A	P.C.B. Holder	11
87	STBG6216A	Chassis	24
88	SUWG3152A	Angle	2

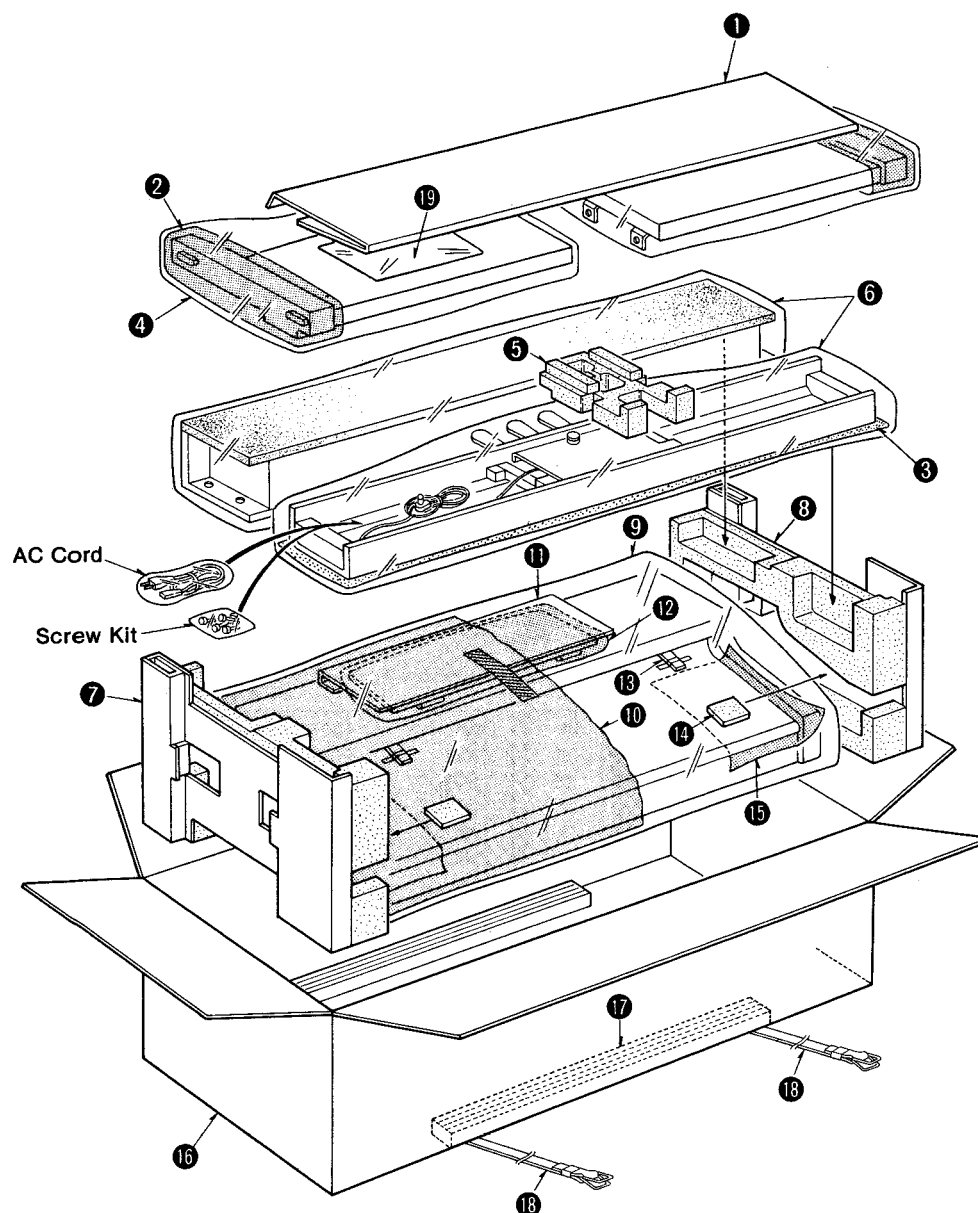
Core (M, MC, EZ, XL, XM only)

89	QLZG003A	Core	3
90	SHRG1270A	Mounting Base	2

SCREWS & WASHERS

N1	XTB3+10AFVC	Screw	3
N2	XTS3+10AFVC	Screw	10
N3	XTT4+10A	Screw	15
N4	XTB4+10B	Screw	2
N5	XTT4+12AFZ	Screw	1
N6	XTS35+10A	Screw	6
N7	XTT4+10AFZ	Screw	3
N8	XTV3+8J	Screw	9
N9	XTW3+10Q	Screw	2
N10	XTT4+20A	Screw	4
N11	XTWSG2	Screw with Washer	1
N12	XTB35+12A	Screw	16
N13	XYN4+F16	Screw with Washer	4
N14	XTW3+10Q	Screw	9
N15	XTT4+30AFVC	Screw	4
N16	XNS12FZ	Nut	2
N17	XTB35+12AFZ	Screw	6
N18	XTB35+16A	Screw	2
N19	QHWG007AA	Nut	2
N20	QHDG019AA	Screw with Washer	8
N21	XTT4+25AFVC	Screw	10
N22	SNE499-1	Nut	8
N23	QHDG004AA	Screw	2
N24	QHDG016AA	Screw with Washer	8
N25	XYN6+F40	Screw with Washer	4
N26	XYN4+F16FZ	Screw with Washer	3
N27	XTB35+14A	Screw	4
N28	XTB4+16A	Screw	8
N29	XTW3+8C	Screw	12
N30	XTB3+6C	Screw	1
N31	XSN4+6	Screw	3
N32	XYN4+C25	Screw with Washer	1
N33	XTW3+10T	Screw	24
N34	XTN4+50AFZ	Screw	2
N35	XTB4+12A	Screw	4
N36	XTV3+10C	Screw	2
N37	SNEG2660A	Screw	2
N38	XTT4+30A	Screw	4
N39	XTB3+12A	Screw	2

PACKING



PACKING PARTS

Ref. No.	Part No.	Description	Per/Set
○ 1	QPGG0163AA	Top Cardboard	1
2	SPHG1730A	Protection Sheet	2
3	QPHG020AA	Protection Sheet	2
4	SPHG2050A	Polyethylene Bag	2
○ 5	QPNG0285AA	Pad	1
6	SPHG1570A	Polyethylene Bag	2
○ 7	QPNG0283BA	Side Pad (Left)	1
○ 8	QPNG0284BA	Side Pad (Right)	1
9	SPHG2200A	Polyethylene Bag	1
10	QPHG028AA	Protection Sheet	1
○ 11	QPGG0164AA	Musik Rack Cardboard	1
12	SPHG1490A	Protection Sheet	1
13	QPHG019AA	Spacer	2
○ 14	QPNG0286AA	Spacer	2
15	QPHG018AA	Protection Sheet	2

Ref. No.	Part No.	Description	Per/Set	
○ 16	SX-PX73	QPGG0162AA	Carton	1
○ 16	SX-PX73M	QPGG0162AB	Carton	1
○ 17		QPGG0165AA	Pad	2
18		SPSG40A	Band	2
INSTRUCTION BOOK				
○ 19	EN	QQFGPX73AA	Instruction Book	1
○ 19	M	QQFGPX73CA	Instruction Book	1
○ 19	EZ	QQFGPX73EA	Instruction Book	1
○ 19	EW	QQFGPX73FA	Instruction Book	1
○ 19	Others	QQFGPX73DA	Instruction Book	1